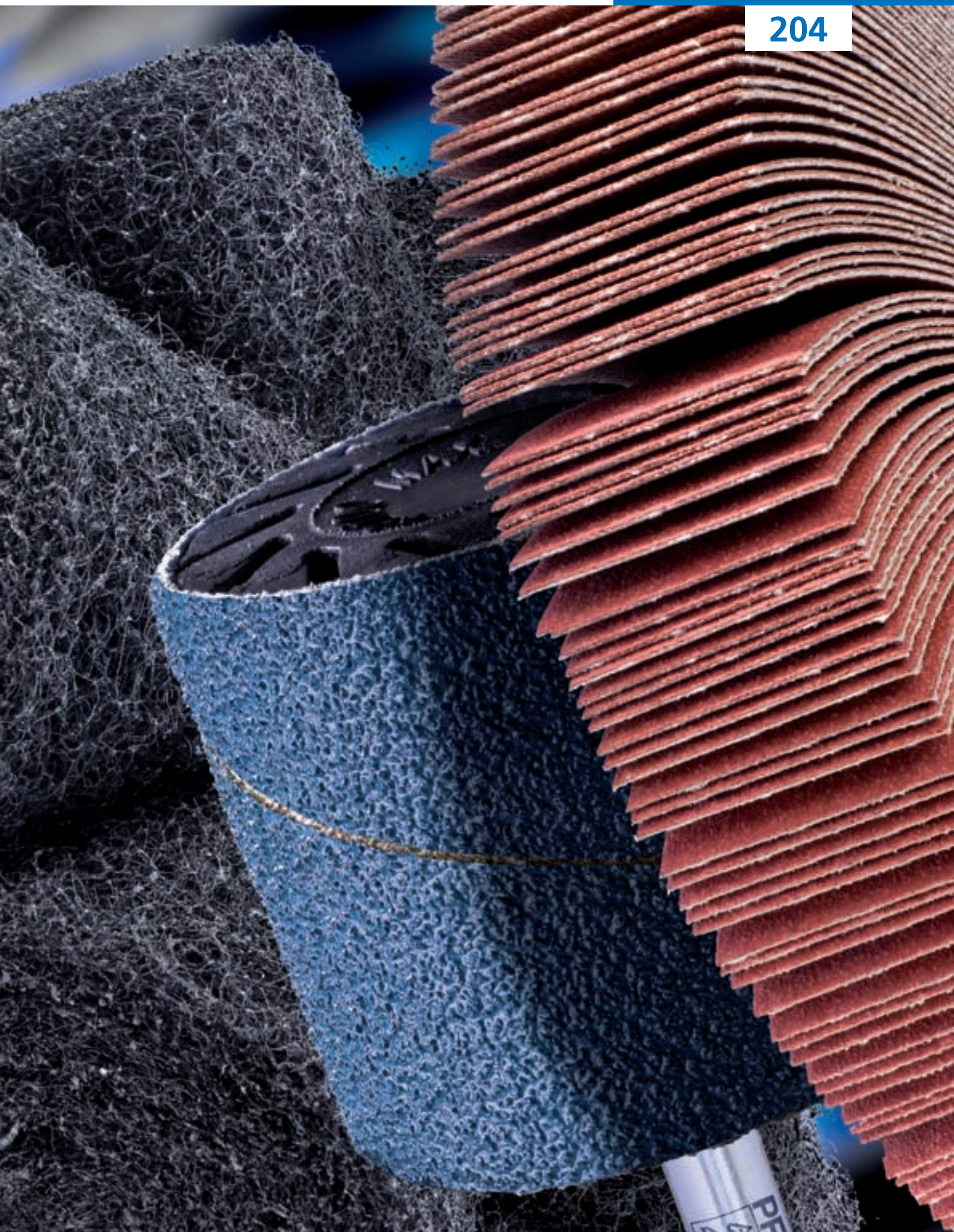
Fine Grinding and Polishing Tools

PFERD

204



Fine Grinding and Polishing Tools

Table of Contents

Nearly all types of material surfaces can be worked on with coated abrasives. Coated abrasives, depending on the type, can be used for wet or dry grinding.
Coated abrasives consist of the following components:
❶ Backing material
❷ Basic bond
❸ Covering bond
❹ Abrasive grit
❺ Abrasive layer
Different workpiece geometries have different tool demands. The PFERD 204 catalogue offers a wide range of coated abrasive tools.
- COMBICLICK® fibre discs
- Fibre discs
- COMBIDISC® and ATADISC® abrasive discs
- Abrasive spiral bands and abrasive belts
- Fan grinders and flap wheels
- Sheets and economy rolls
- POLIROLL® and POLICO®

In catalogue 206:
- POLIFAN® flap discs
  Please refer to catalogue 206 for order data on POLIFAN® flap discs.

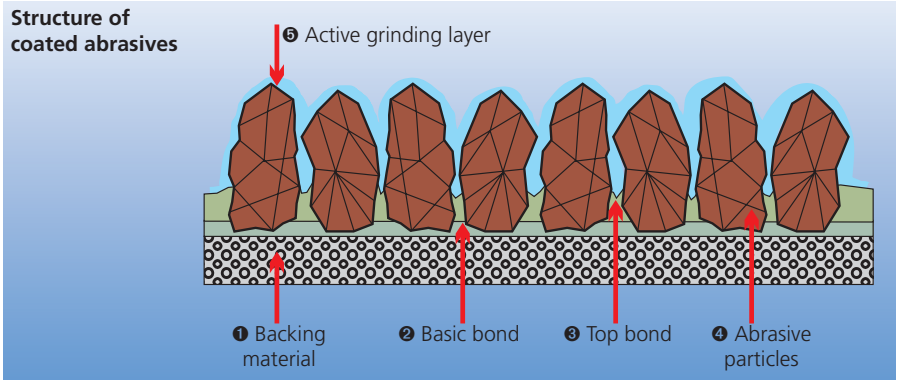
Backing material

The bond and the abrasive grit are fixed to the backing material. The selection of backing materials differ in terms of tensile strength, flexibility and wear. Selection of backing material fitting the demand of the grinding task in mind. The PFERD range is divided into three groups:

Paper:
The main applications for coated abrasives paper backing type are in the wood-processing industry and small trade (carpenters, painters, lacquerers etc.) These coated abrasives are not widely used in industrial metal processing. Abrasives for manual grinding are generally made from paper with a mass per unit area of 70-100 g/m². Heavier papers are used to manufacture narrow and wide belts cloth for stationary machine-applications.

Cloth:
Coated abrasives with cloth backing are mainly used in the metal processing industry.

Vulcanized fibre:
Vulcanized fibres in different strengths, adapted for each application, are mainly used for the production of fibre discs. Vulcanized fibres provide an extremely strong, robust backing and are extremely wear-resistant.



Bond

Different resin bonds are used in the manufacture of coated abrasives for anchoring the abrasive grit to the backing.
First of all, the backing material is coated with the basic bond. Then the abrasive grit is strewn evenly across the surface and aligned in a special procedure. The abrasive grit is then anchored firmly with the coating bond, which also protects the abrasive grit against forces and loads resulting from the grinding process.

Abrasive grit

Choosing the correct product strongly influences the surface finish and the economic value of a process. We recommend tools marked "COOL" in particular when working with stainless steel.
The standard materials used to make abrasive grit are:

Aluminium oxide:
Many types of aluminium oxide are used for producing abrasives. They can be used in their fused or sintered forms. Their hardness and toughness grade can be influenced using special manufacturing methods or additives. Normal aluminium oxides with a "sharp-edged" grit shape are mainly used in the production of coated abrasives.

SiC (silicon carbide):
SiC is a synthetically produced abrasive grit, which is very sharp-edged but not particularly tough, however, it has an extremely high hardness. SiC is particularly suitable for work on titanium, aluminium, bronze, stone and plastic.

Zirconia aluminia:
Zirconia aluminia is a fused mixture of aluminium oxide and zirconium oxide. In comparison to aluminium oxide, zirconia aluminia is not as hard but it is tougher. The high proportion of zirconium oxide gives the zirconia aluminia grit an exceptionally effective self-sharpening effect, giving excellent stock removal, cool grinding and top tool life.

Ceramic grit:
Sintered aluminium oxides are divided into sintered bauxite aluminium oxides and sol-gel aluminium oxides. Sol-gel aluminium oxide is mainly used for coated abrasives. This highly modern abrasive has become increasingly popular through its toughness and its good self-sharpening property.

Grit sizes

The different grit sizes for coated abrasives are defined in the ISO 6344 and adopted in the FEPA standards:
- **Coarse:**
  P 80 - 60 - 50 - 40 - 36 - 24 - 20 - 16 - 12
- **Medium:**
  P 280 - 240 - 220 - 180 - 150 - 120 - 100
- **Fine:**
  P 600 - 500 - 400 - 360 - 320
- **Superfine:**
  P 1500 - 1200 - 1000 - 800

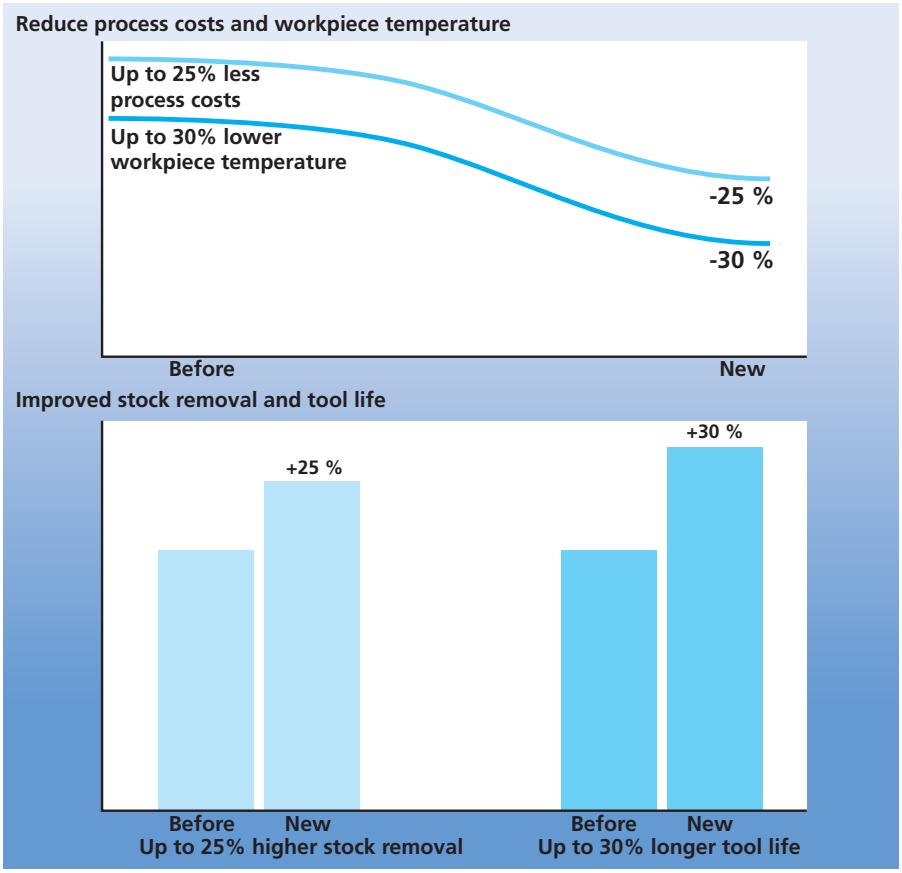
Type of operation / Processing step	Face-down grinding Tools for use with backing pad 	Page	Page	Belt grinding Tools for belt grinders 	Page
Modification of workpiece geometry 	COMBIDISC® ■ abrasive discs ■ diamond abrasive discs	18-22 23	ATADISC® abrasive discs	28-29	Short abrasive belts	33-36
	COMBIDISC® midget fibre discs	22	Self-adhesive discs	15	Long abrasive belts	37-38
	COMBIDISC®-mini-POLIFAN®	25	Fibre discs COMBICLICK® fibre discs	12-13 8-10		
Multi-step fine grinding, reducing roughness 	COMBIDISC® ■ abrasive discs ■ diamond abrasive discs	18-22 23	Self-adhesive discs	15	Short abrasive belts	33-36
	ATADISC® abrasive discs	28-29	Velcro-backed abrasive discs	43	Long abrasive belts	37-38
	Poliflex® discs	90	Fibre discs COMBICLICK® fibre discs	12-13 8-10		
Fine grinding Ultra fine grinding 	Grinding oils	110	Poliflex® discs	90	Grinding oils	110
	COMBIDISC® abrasive discs	18-22	Fibre disc	12-13	Short abrasive belts and Long abrasive belts	33-36 37-38
	ATADISC® abrasive discs	28-29	COMBICLICK® fibre discs	8-10	Short abrasive belts, non-woven	36
Cleaning 	COMBIDISC® non-woven discs	24	COMBIDISC® brushes	23	Short abrasive belts, non-woven	36
	COMBIDISC®-POLICLEAN® discs	26	POLIVLIES® self-adhesive discs	80		
	COMBIDISC® track grinder	27	POLICLEAN® discs	84		
Creation of visual surface effects 	COMBIDISC® non-woven discs	24	Marbling tools and discs	81, 91	Short abrasive belts, non-woven	36
	POLIVLIES® flap discs	80	PUR-structuring tools	89-91		
	POLIVLIES® self-adhesive discs	80	COMBIDISC® TX discs	26		
Polishing 	COMBIDISC® felt discs	26				

Peripheral grinding
Mounted/unmounted tools

Manual grinding

PFERD presents a newly developed, patented quick-mounting and cooling system for use with fibre discs.
Our COMBICLICK® system combines an innovative flexible backing pad with a rugged mounting system at the back of the disc. The new backing pad allows COMBICLICK® fibre discs to be used with standard angle grinders. The geometry of the cooling slots ensures a high throughput of air, thus significantly reducing thermal loads on the abrasive material and workpiece. The rugged mounting fixture, secure disc attachment to the backing pad plus optimized cooling help to provide

- up to 30% lower workpiece temperature,
- up to 25% increased stock removal,
- up to 30% longer service life and improved utilization of abrasive product and
- up to 30% less tool wear.



User benefits:

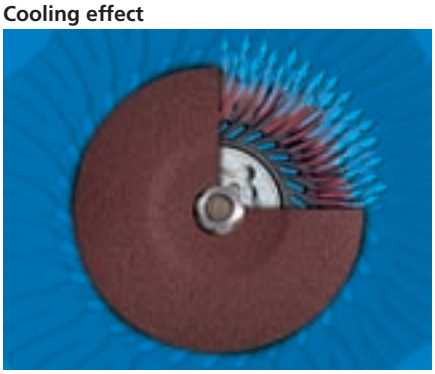
System

Exceptional ease of handling and convenience.

Mounting principle

Extremely easy and fast tool change reduces process costs.

Cooling effect

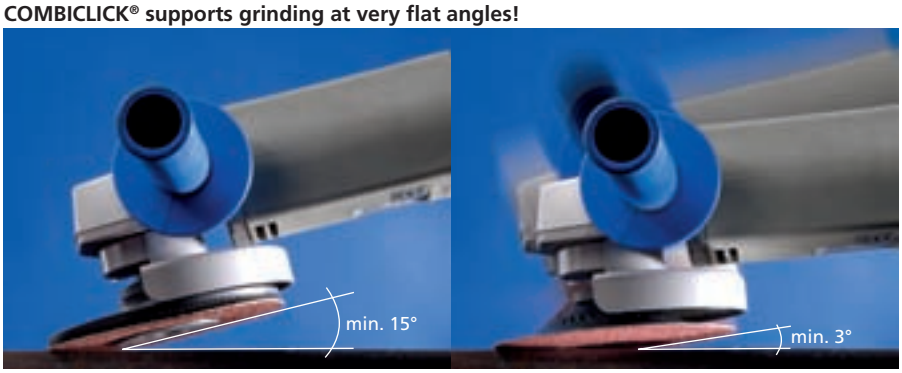


Very good cooling of the tool and workpiece.

Flexible grinding

COMBICLICK® fibre discs give a particularly soft and flexible abrasive performance in face grinding.

COMBICLICK® supports grinding at very flat angles!



Before **Application with COMBICLICK®**

The COMBICLICK® system eliminates surface scratching due to projecting metal parts and maximizes abrasive grit usage.

PFERD provides a wide range of COMBICLICK® fibre discs differing in:
- Grit sizes,
- abrasives and
- dimensions.

Our comprehensive product range provides the optimum tool from coarse to fine grinding.

Advantages

- Long tool life.
- Uniform surface finish.
- Extremely high stock removal.
- High flexibility.
- Excellent grit adhesion.

Application examples

- Working on welds.
- Deburring of steel components.
- Rough grinding work.
- Fine grinding of stainless steel components (INOX).
- Removal of mill and casting skins.
- For work on narrow, hard-to-reach places (e.g. cooling ribs).

Recommendations for use

COMBICLICK® fibre discs are used in combination with the COMBICLICK® backing pad on standard commercial angle grinders.
The use of the appropriate grinding oil on the different materials can substantially increase tool life and abrasive performance of the tools made from coated abrasives. For detailed information and order data regarding grinding oils, please refer to page 110.

Ordering note

Please order COMBICLICK® backing pad as a separate item.
For detailed information and order data regarding backing pads, refer to page 10.

Safety recommendations

The maximum permitted peripheral speed is 80 m/s.

= Wear eye protection!

= Wear hearing protection!

= Wear a respirator!

= Only permitted with a backing pad!

= Read the instructions!

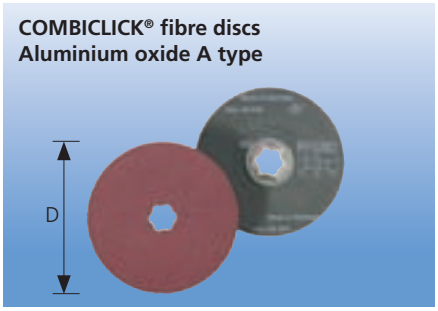
= Not permitted for wet grinding!

Application recommendations for use of COMBICLICK® fibre discs

Material groups ▼		Abrasive ▶	Alum. oxide A	Alum. oxide A-COOL	Zirconia alum. Z	Zirconia alum. Z-COOL	Ceramic oxide CO	Ceramic oxide CO-COOL
Steel, cast steel	Non-hardened, non heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steels	●		❍		❍	
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steels	❍		●		●	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels		●	❍	●		●
Non-ferrous metals	Soft non-ferrous metals	Soft alu-alloys	❍	●		❍		❍
		Brass, copper, zinc	●		❍		❍	
	Hard non-ferrous metals	Hard alu-alloys	●		❍		❍	
		Bronze, titanium			❍	●	❍	●
	High-temperature resistant materials	Nickel based alloys, cobalt based alloys			❍	●	❍	●
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL, with nodular graphite cast iron EN-GJS, white annealed cast iron EN-GJMW, black cast iron EN-GJMB	●		❍		●	
Plastics and other materials	Plastics, wood, paint	Fibre reinforced plastics, thermoplastics, wood, chipboard, paint	●					

● = highly suitable ❍ = suitable

COMBICLICK® fibre discs
Aluminium oxide A type



For general-purpose grinding work from coarse to fine grinding in industry and crafts.

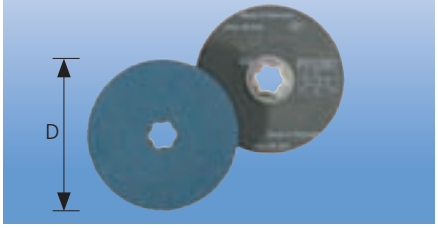
Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**722138**
CC-FS 180 A 60

How to order:
CC-FS = COMBICLICK® fibre disc
180 = Dia. D [mm]
A = Aluminium oxide A
60 = Grit size
Please state required grit size.

Order No.	Grit size						Dia. D [mm]	Max. speed [RPM]		
	24	36	50	60	80	120				
	EAN 4007220									
CC-FS 115 A	763179	763186	763193	763209	763216	763223	115	13.300	25	750
CC-FS 125 A	721988	721995	722008	722039	722060	722077	125	12.200	25	875
CC-FS 180 A	722091	722107	722121	722138	722145	722152	180	8.500	25	1.850

COMBICLICK® fibre discs
Zirconia alumina Z type



For coarse grinding with high stock removal and long tool life.

The high-performance abrasive zirconia aluminia performs best on high-performance angle grinders with increased grinding pressure.

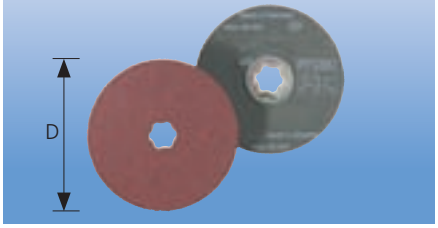
Abrasive: Zirconia alumina Z

Ordering example:
EAN 4007220**722732**
CC-FS 180 Z 60

How to order:
CC-FS = COMBICLICK® fibre disc
180 = Dia. D [mm]
Z = Zirconia alumina Z
60 = Grit size
Please state required grit size.

Order No.	Grit size						Dia. D [mm]	Max. speed [RPM]		
	24	36	50	60	80	120				
	EAN 4007220									
CC-FS 115 Z	-	722572	722596	763230	722619	722633	115	13.300	25	750
CC-FS 125 Z	722640	722657	722664	722671	722688	722695	125	12.200	25	875
CC-FS 180 Z	722701	722718	722725	722732	722749	722756	180	8.500	25	1.850

COMBICLICK® fibre discs
Ceramic oxide CO



For aggressive grinding with maximum stock removal and excellent tool life.

The ceramic grit is especially designed for work on hard materials and coatings. It is most effective when used with high-performance angle grinders.

Abrasive: Ceramic oxide CO

Ordering example:
EAN 4007220**722350**
CC-FS 180 CO 60

How to order:
CC-FS = COMBICLICK® fibre disc
180 = Dia. D mm
CO = Ceramic oxide CO
60 = Grit size
Please state required grit size.

Order No.	Grit size						Dia. D [mm]	Max. speed [RPM]		
	24	36	50	60	80	120				
	EAN 4007220									
CC-FS 115 CO	763247	763254	763261	763278	763285	763292	115	13.300	25	750
CC-FS 125 CO	722084	722169	722183	722206	722237	722268	125	12.200	25	875
CC-FS 180 CO	722282	722305	722336	722350	722374	722428	180	8.500	25	1.850

For general-purpose grinding work from fine to finest grinding of poorly heat-conducting materials.

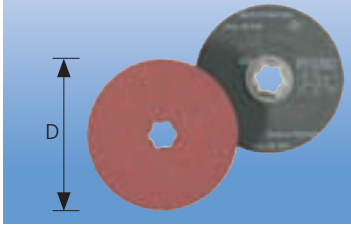
Grinding additives in the coating clearly improve stock removal, prevent clogging and allow cooler grinding.

Abrasive: Aluminium oxide A-COOL

Ordering example:
EAN 4007220**722411**
CC-FS 180 A-COOL 60

How to order:
CC-FS = COMBICLICK® fibre disc
180 = Dia. D mm
A = Aluminium oxide A
COOL = Bond
60 = Grit size
Please state required grit size.

COMBICLICK® fibre discs Aluminium oxide A-COOL



Order No.	Grit size							Dia. D [mm]	Max. speed [RPM]		
	50	60	80	120	150	180	220				g
	EAN 4007220										
CC-FS 115 A-COOL	-	722176	722190	722213	722220	-	722244	115	13.300	25	750
CC-FS 125 A-COOL	722251	722275	722299	722312	722329	722343	722367	125	12.200	25	875
CC-FS 180 A-COOL	722398	722411	722435	722459	722466	722527	722541	180	8.500	25	1.850

For coarse grinding work; high stock removal with cool grinding.

The high-performance abrasive zirconia alumina grinds best on high-performance angle grinders with increased grinding pressure.

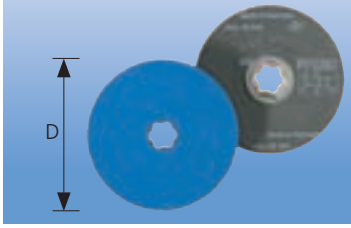
Grinding additives in the coating clearly improve stock removal, prevent clogging and result in cooler grinding of materials which do not conduct heat well.

Abrasive: Zirconia aluminia Z-COOL

Ordering example:
EAN 4007220**722114**
CC-FS 180 Z-COOL 60

How to order:
CC-FS = COMBICLICK® fibre disc
180 = Dia. D mm
Z = Zirconia alumina Z
COOL = Bond
60 = Grit size
Please state required grit size.

COMBICLICK® fibre discs Zirconia alumina Z-COOL



Order No.	Grit size				Dia. D [mm]	Max. speed [RPM]		
	36	50	60	80				g
	EAN 4007220							
CC-FS 125 Z-COOL	722763	722770	722787	722015	125	12.200	25	875
CC-FS 180 Z-COOL	722022	722046	722114	722053	180	8.500	25	1.725

For highly-abrasive grinding with maximum stock removal on hard materials which do not conduct heat well.

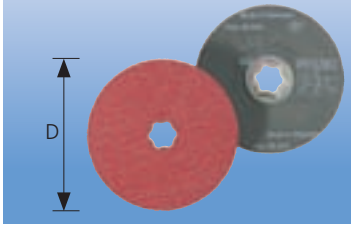
Grinding additives in the coating clearly improve stock removal, prevent clogging and result in cooler grinding.

Abrasive: Ceramic oxide CO-COOL

Ordering example:
EAN 4007220**722589**
CC-FS 180 CO-COOL 60

How to order:
CC-FS = COMBICLICK® fibre disc
180 = Dia. D mm
CO = Ceramic oxide CO
COOL = Bond
60 = Grit size
Please state required grit size.

COMBICLICK® fibre discs Ceramic oxide CO-COOL



Order No.	Grit size						Dia. D [mm]	Max. speed [RPM]		
	24	36	50	60	80	120				g
	EAN 4007220									
CC-FS 115 CO-COOL	763308	763315	763322	763339	763346	763353	115	13.300	25	750
CC-FS 125 CO-COOL	722442	722473	722480	722497	722503	722510	125	12.200	25	875
CC-FS 180 CO-COOL	722534	722558	722565	722589	722602	722626	180	8.500	25	1.725

COMBICLICK® backing pads

This backing pad permits the use of COMBICLICK® fibre discs on all common angle grinders.
The cooling slot geometry ensures a high throughput of air, thus significantly reducing thermal loads of the abrasive material and workpiese.
The patented COMBICLICK® mounting system minimizes tool changing times.

Safety note:
The maximum permitted peripheral speed is 80 m/s.

Order No.	EAN 4007220	Thread	Suitable for	Suitable for machine types	Max. speed [RPM]		9
CC-GT 115-125 M14	725764	M14	CC-FS 115, CC-FS 125	Angle grinders 115 and 125 with M 14 spindle	13.300	1	165
CC-GT 115-125 5/8"	725771	5/8	CC-FS 115, CC-FS 125	Angle grinders 115 and 125 with 5/8" spindle	13.300	1	165
CC-GT 180 M14	725788	M14	CC-FS 180	Angle grinder with M 14 spindle	8.500	1	250
CC-GT 180 5/8"	725795	5/8	CC-FS 180	Angle grinder with 5/8" spindle	8.500	1	250

PFERD supplies an extensive line-up of fibre discs differing in:
- Grit sizes,
- abrasives and
- dimensions.

Our comprehensive product range provides the optimum tool from coarse to fine grinding.

PFERD fibre discs are produced according to ISO 16057 in the shape A1, type F under the name "Vulcanized fibre disc".

Advantages

- Long tool life.
- Uniform surface finish.
- Extremely high stock removal.
- High flexibility.
- Excellent grit adhesion.

Application examples

- Work on welds.
- Deburring steel components.
- Coarse grinding work.
- Fine grinding of stainless steel components (INOX).
- Removal of mill and casting scale.

Recommendations for use

Fibre discs are used with backing pad according to ISO 15636 on commercial angle grinders. The tool life and abrasive performance can be substantially increased for coated abrasive tools if grinding oil is used. For detailed information and order data regarding grinding oils, please refer to page 110.

Ordering note

Please order the backing pad as a separate item. Please refer to page 14 for detailed information and order data regarding the supporting discs.

Safety recommendations

The maximum permitted circumferential speed is 80 m/s.

 = Wear eye protection!

 = Wear hearing protection!

 = Wear a respirator!

 = Only permitted with a backing pad!

 = Read the instructions!

 = Not permitted for wet grinding!

Recommend use of fibre discs

Material groups ▼			Abrasive ▶ Alum. oxide A	Alum. oxide A-COOL	Zirconia alum. Z	Zirconia alum. Z-COOL	Ceramic oxide CO	Ceramic oxide CO-COOL
Steel, cast steel	Non-hardened, non heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steels	●		❍		❍	
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steels	❍		●		●	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels		●	❍	●		●
Non-ferrous metals	Soft non-ferrous metals	Soft aluminium alloys	❍	●		❍		❍
		Brass, copper, zinc	●		❍		❍	
	Hard non-ferrous metals	Hard aluminium alloys	●		❍		❍	
		Bronze, titanium			❍	●	❍	●
	High-temperature resistant materials	Nickel based alloys NiCo alloys			❍	●	❍	●
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL, with nodular graphite cast iron EN-GJS, white annealed cast iron EN-GJMW, black cast iron EN-GJMB	●		❍		●	
Plastics and other materials	Plastics, wood, paint	Fibre reinforced plastics, thermo-plastics, wood, chipboard, paint	●					

● = highly suitable ❍ = suitable

Fibre discs
Aluminium oxide A type

For general-purpose grinding work from coarse to fine grinding in industry and crafts.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**165089**
FS 180-22 A 60

How to order:

FS	= Fibre disc
180	= Dia. D [mm]
22	= Centre hole dia. H [mm]
A	= Aluminium oxide A
60	= Grit size
	Please state required grit size.

Order No.	Grit size								D x H [mm]	Max. speed [RPM]		g
	16	24	36	50	60	80	100	120				
	EAN 4007220											
FS 115-22 A	164914	164952	165003	500910	165058	165102	165157	500934	115 x 22	13.300	25	625
FS 125-22 A	164921	164969	165010	696286	165065	165119	165164	500941	125 x 22	12.200	25	750
FS 150-22 A	-	-	165027	-	165072	165126	-	-	150 x 22	10.200	25	1.250
FS 180-22 A	164945	164983	165034	696323	165089	165133	165188	165201	180 x 22	8.500	25	1.725

Fibre discs
Zirconia alumina Z type

For coarse grinding with high stock removal and long tool life.

The high-performance abrasive zirconia aluminia grinds best on high-powered angle grinders under increased grinding pressure.

Abrasive: Zirconia alumina Z

Ordering example:
EAN 4007220**216699**
FS 180-22 Z 60

How to order:

FS	= Fibre disc
180	= Dia. D [mm]
22	= Centre hole dia. H [mm]
Z	= Zirconia alumina Z
60	= Grit size
	Please state required grit size.

Order No.	Grit size							D x H [mm]	Max. speed [RPM]		g
	24	36	50	60	80	100	120				
	EAN 4007220										
FS 115-22 Z	216569	216576	216583	216590	216606	696606	696613	115 x 22	13.300	25	625
FS 125-22 Z	216613	216620	216637	216644	216651	696620	696637	125 x 22	12.200	25	750
FS 180-22 Z	216668	216675	216682	216699	216705	696644	696651	180 x 22	8.500	25	1.725

Fibre discs
Ceramic oxide CO type

For abrasive grinding with maximum stock removal and excellent tool life.

The ceramic grit is well suited for work on hard materials and layers. It should preferably be used with high-performance angle grinders.

Abrasive: Ceramic oxide CO

Ordering example:
EAN 4007220**617533**
FS 180-22 CO 60

How to order:

FS	= Fibre disc
180	= Dia. D [mm]
22	= Centre hole dia. H [mm]
CO	= Ceramic oxide CO
60	= Grit size
	Please state required grit size.

Order No.	Grit size						D x H [mm]	Max. speed [RPM]		g
	24	36	50	60	80	120				
	EAN 4007220									
FS 115-22 CO	617434	617441	696781	617458	617465	696804	115 x 22	13.300	25	625
FS 125-22 CO	617472	617489	696811	617496	617502	696835	125 x 22	12.200	25	750
FS 180-22 CO	617519	617526	696842	617533	617540	696866	180 x 22	8.500	25	1.725

For general-purpose grinding work from fine to finest grinding on poorly heat-conducting materials.

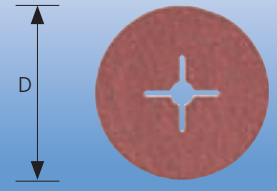
Active additives in the coating ensure substantially increased stock removal while preventing loading and heat build-up in the workpiece.

Abrasive: Aluminium oxide A-COOL

Ordering example:
EAN 4007220**696354**
FS 115-22 A-COOL 60

How to order:
FS = Fibre disc
115 = Dia. D [mm]
22 = Centre hole dia. H [mm]
A = Aluminium oxide A
COOL = Bond
60 = Grit size
Please state required grit size.

Fibre discs
Aluminium oxide A-COOL type



Order No.	Grit size								D x H [mm]	Max. speed [RPM]		
	50	60	80	100	120	150	180	220				g
	EAN 4007220											
FS 115-22 A-COOL	696347	696354	696361	696378	696385	696392	696408	696415	115 x 22	13.300	25	625
FS 125-22 A-COOL	696422	696439	696446	696453	696460	696477	696484	696491	125 x 22	12.200	25	750
FS 180-22 A-COOL	696507	696514	696521	696538	696552	696583	696569	696590	180 x 22	8.500	25	1.725

For coarse grinding with high stock removal and cool grinding.

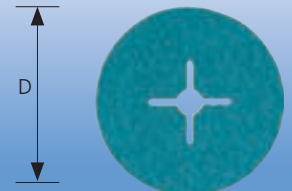
Zirconia alumina is a high-performance abrasive which delivers best results on powerful angle grinders at increased contact pressure. Active additives in the coating ensure substantially improved stock removal and a reduced thermal load on poorly heat-conducting materials.

Abrasive: Zirconia alumina Z-COOL

Ordering example:
EAN 4007220**696682**
FS 115-22 Z-COOL 60

How to order:
FS = Fibre disc
115 = Dia. D [mm]
22 = Centre hole dia. H [mm]
Z = Zirconia alumina Z
COOL = Bond
60 = Grit size
Please state required grit size.

Fibre discs
Zirconia alumina Z-COOL type



Order No.	Grit size				D x H [mm]	Max. speed [RPM]		
	36	50	60	80				g
	EAN 4007220							
FS 115-22 Z-COOL	696668	696675	696682	696699	115 x 22	13.300	25	625
FS 125-22 Z-COOL	696705	696712	696729	696736	125 x 22	12.200	25	750

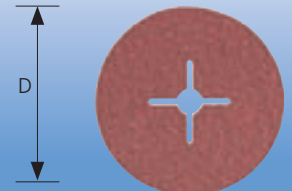
For aggressive grinding achieving maximum stock removal on hard, poorly heat conducting materials. Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

Abrasive: Ceramic oxide CO-COOL

Ordering example:
EAN 4007220**697054**
FS 180-22 CO-COOL 60

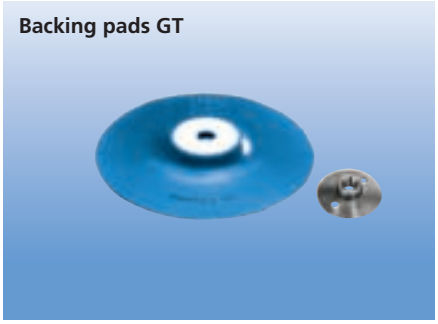
How to order:
FS = Fibre disc
180 = Dia. D [mm]
22 = Centre hole dia. H [mm]
CO = Ceramic oxide CO
COOL = Bond
60 = Grit size
Please state required grit size.

Fibre discs
Ceramic oxide CO-COOL type



Order No.	Grit size							D x H [mm]	Max. speed [RPM]		
	24	36	50	60	80	100	120				g
	EAN 4007220										
FS 115-22 CO-COOL	696880	696897	696903	696910	696927	696934	696941	115 x 22	13.300	25	625
FS 125-22 CO-COOL	696958	696965	696972	696989	696996	697009	697016	125 x 22	12.200	25	750
FS 180-22 CO-COOL	697023	697030	697047	697054	697061	697078	697085	180 x 22	8.500	25	1.725

Backing pads GT



Using this backing pad, fibre discs can be used on commercial angle grinders.

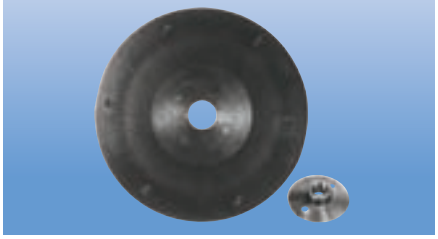
Type GT flexible backing pads conform to ISO 15636.

Safety note:
The maximum permitted peripheral speed is 80 m/s.

Ordering note:
The appropriate flange is included in delivery.

Order No.	EAN 4007220	Suitable for tool dia. [mm]	Thread	Suitable for machine types	Max. speed [RPM]		g
GT 115 MF M10	668047	115	M10	PWS 4/100 MHS, WT 7 E M10	13.300	1	70
GT 115 MF M14	668054	115	M14	PW 12/120, PW 9/120 DH, WT 10 H, WT 7 E M14	13.300	1	70
GT 125 MF M14	668061	125	M14	PW 12/120, WT 10 H	12.200	1	100
GT 150 MF M14	668078	150	M14	WT 10 H	10.200	1	250
GT 180 MF M14	668085	180	M14	WT 10 H, WT 12 E	8.500	1	270

High-performance backing pads for fibre discs



Using this high-performance backing pad, fibre discs can be used on commercial angle grinders.

Advantages:
- The abrasion-resistant, glass fibre reinforced plastic guarantees a long tool life.
- Particularly suitable for cool grinding due to the radial cooling fins.
- High stock removal by the fibre discs due to their strong, rigid design.

Safety note:
The maximum permitted peripheral speed is 80 m/s.

Ordering note:
Supplied with matching flange.

Order No.	EAN 4007220	Suitable for tool dia. [mm]	Thread	Suitable for machine types	Max. speed [RPM]		g
H-GT 115 MF M14	668115	115	M14	PW 12/120, PW 9/120 DH, WT 10 H, WT 7 E M14	13.300	1	105
H-GT 125 MF M14	668122	125	M14	PW 12/120, WT 10 H	12.200	1	120
H-GT 180 MF M14	668139	180	M14	WT 10 H	8.500	1	250

Flanges for backing pads

This replacement flange can be used for GT type support discs.

Advantages:
- Matching bore spacings for standard commercial face spanners.
- Cost-effective replacement of lost flanges.

Order No.	EAN 4007220	Thread	Suitable for machine types		g
FL-GT 115 M10	668146	M10	PWS 4/100 MHS, PWS 5/130, WT 7 E M10	1	30
FL-GT 80-115 M14	668153	M14	PW 12/120, PW 9/120 DH, WT 10 H, WT 7 E M14	1	28
FL-GT 125 M14	668160	M14	PW 12/120, WT 10 H	1	34
FL-GT 150-230 M14	668177	M14	WT 10 H, WT 12 E	1	66

Self-adhesive discs are suitable for grinding larger surfaces, preferably with adjustable speed angle grinders.

The flexible system of self-adhesive discs and self-adhesive discs holders allows them to be used on contours.

Abrasive: Aluminium oxide A

Advantages:
- Quick tool change due to self-adhesive system.
- Universal tool, suitable for nearly all materials.
- High flexibility, adapts well to contours.

Safety note:
The maximum permissible peripheral speed is 32 m/s.

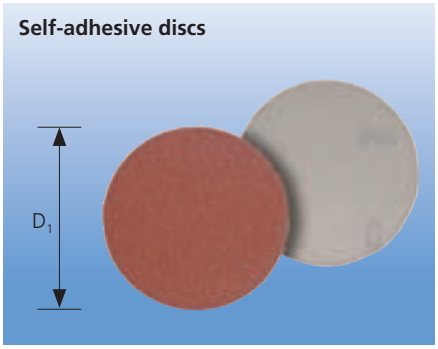
Ensure that disc is mounted concentrically on holder!

Ordering note:
Please order arbor separately!

Ordering example:
EAN 4007220**294321**
KR 115 A 120

How to order:
KR = Self-adhesive grinding disc
115 = Dia. D_1 [mm]
A = Aluminium oxide A
120 = Grit size
Please state required grit size.

Self-adhesive discs



Order No.	Grit size						D_1 [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
	40	60	80	120	150	180					
	EAN 4007220										
KR 115 A	294291	294307	294314	294321	294338	294345	115	5.000	5.300	50	550
KR 125 A	294352	294369	294376	294383	294390	294406	125	4.600	4.850	50	600

Using this self-adhesive disc holder, self-adhesive discs can be used on standard commercial angle grinders with adjustable or slow-running speed ranges with M14 spindle threads.

Advantages:
- Quick tool change via the self-adhesive system.
- High flexibility and good contour adaptation due to flexible plastic.

Safety note:
The maximum permissible peripheral speed is 32 m/s.

Ordering example:
EAN 4007220**294413**
KRH 115 M 14

How to order:
KRH = Self-adhesive disc holders
115 = Dia. D [mm]
M14 = Thread

Self-adhesive disc holders

Order No.	EAN 4007220	Dia. D [mm]	Thread	Max. speed [RPM]		g
KRH 115 M14	294413	115	M14	5.300	1	170
KRH 125 M14	294420	125	M14	4.850	1	200

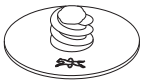
COMBIDISC® tools cover the full range of surface finishing applications. From coarse grinding through surface texturing to face-down mirror polishing, these products address the most demanding and sophisticated machining tasks.

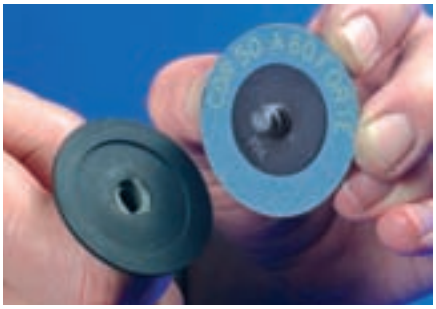
PFERD offers two alternative mounting systems:

CD system

Tool side:
Screw connection with inner thread (metal)
Also suitable for systems available in the market: PSG, Power Lock Type II "turn on", SocAtt, Turn-On

CDR system





Tool side:
Screw connection with outer thread (plastic)
Also suitable for systems available in the market: Roloc™, Lockit, Speed Lok TR, Power Lock Type III, Fastlock-System B, Roll-On

Advantages

- Easy to use.
- Rapid tool change.
- Firmly secured disc.
- Disc does not become detached under influence of heat.
- Vibration-free operation due to perfectly centralized tool.
- Tools from 20-75 mm dia. in various grit types and sizes.

Application examples

- Tool and mould making, modelling.
- Mechanical engineering, automotive applications.
- Aerospace industry.
- Jet engine construction and maintenance.
- Construction of tanks, pressure vessels and process equipment (e.g. for the foodstuff processing and chemical industry).

Ordering note

Using an appropriate grinding oil for the various materials can significantly increase the tool life and the grinding output of tools made of coated abrasives. For detailed information and ordering data regarding grinding oils, please refer to page 110.

Safety recommendations


= Wear eye protection!


= Wear hearing protection!


= Wear gloves!


= Read the instructions!

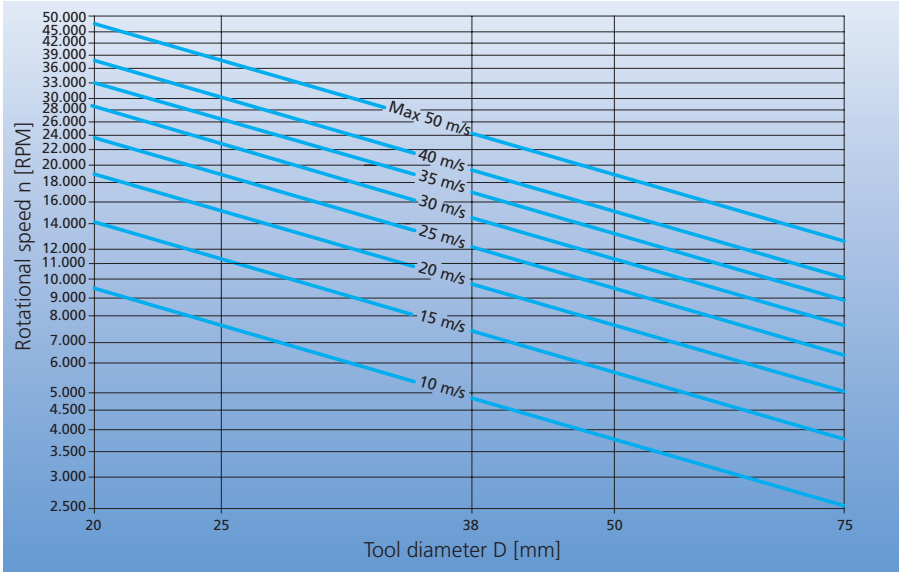
Recommendations for use

Application ▼	Recommended cutting speed [m/s] 5 10 15 20 25 30 35 40	Recommended tools ▼
Grinding of steel, and cast steel		Abrasive discs A, A-FLEX, A-PLUS, A-Forte, Z
Grinding of stainless steel (INOX)		Abrasive discs A-COOL, CO-COOL, TX-discs
Coarse grinding of steel, and cast steel		Mini-POLIFAN®, midget fibre grinders, abrasive discs Z
Grinding of high-temperature materials (NiCo alloys)		Abrasive discs SiC, Z and CO-COOL
Grinding of hard non-ferr. metals, titanium, bronze, very hard alum. alloys		Abrasive discs SiC, A-COOL, CO-COOL, TX-discs
Grinding of soft non-ferrous metals, brass, copper, aluminium alloys		Abrasive discs A, A-FLEX, A-PLUS, A-Forte, A-COOL, TX-discs
Grinding of hard metal, hard substance coating, armouring, glass, GFK, CFK		Diamond abrasive discs
Cleaning, texturing		Non-woven and POLICLEAN® discs, brushes
Polishing		Felt discs

Cutting speed COMBIDISC® tools

The cutting speeds are represented using blue diagonal lines. The vertical line representing the tool dia. meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin where you will find the corresponding rotational speed RPM) of the COMBIDISC® tools and machine.

Example
CD 50 A-COOL 60
Operating sequence:
Grinding of stainless steel (INOX)
Cutting speed: 20-25 m/s
Speed range: 7.600-9.600 RPM



Safety notes

- The maximum permissible peripheral speed is 50 m/s.
- For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**266809**
SBH 50 M

How to order:
SBH = Abrasive disc holder
50 = Dia. D mm
M = medium-hard
Please state required grit size.

COMBIDISC® abrasive disc holders SBH/SBHR

Order No.	Type			Dia. D [mm]	S x L [mm]	Max. speed [RPM]		
	hard (H)	medium (M)	soft (W)					
	EAN 4007220							
CD system								
SBH 20	-	265901	-	20	6 x 40	47.500	1	30
SBH 25	-	266755	-	25	6 x 40	38.000	1	35
SBH 38	266786	266779	266762	38	6 x 40	25.000	1	45
SBH 50	266816	266809	266793	50	6 x 40	19.000	1	50
SBH 75	266847	266830	266823	75	6 x 40	12.500	1	90
CDR system								
SBHR 20	-	776315	-	20	6 x 40	47.500	1	30
SBHR 25	-	776322	-	25	6 x 40	38.000	1	35
SBHR 38	776339	597057	776346	38	6 x 40	25.000	1	45
SBHR 50	776353	597064	776360	50	6 x 40	19.000	1	50
SBHR 75	776377	597071	776384	75	6 x 40	12.500	1	90

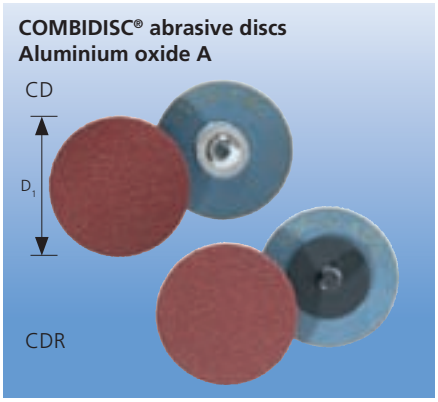
Adapters

The abrasive disc holder shank can be replaced by a suitable adapter.
This can be used to mount the abrasive disc holder directly onto the drive spindle.
The following adapters are available:
AF 14-1/4 (female thread M14, male thread 1/4-20 UNC). Suitable for machines with M14 spindle.

SPV-20 (female thread 1/4-20 UNC, male thread 1/4-20 UNC). Suitable for machines with 1/4-20 UNC spindle, e.g. for PW 3/120 DH.

Ordering note
Please refer to catalogue 209 for detailed information and order data regarding the adapters.

COMBIDISC® abrasive discs Aluminium oxide A



The Aluminium oxide A type is suitable for general use on metals and other materials.

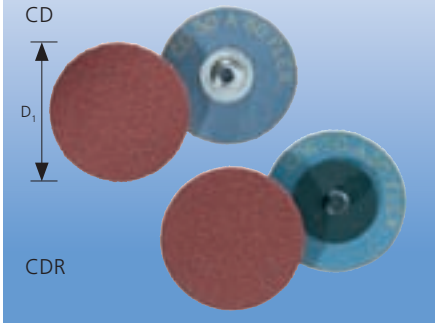
Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**266175**
CD 38 A 180

How to order:
CD = COMBIDISC® abrasive disc
38 = Dia. D_1 [mm]
A = Aluminium oxide A
180 = Grit size
Please state required grit size.

Order No.	Grit size						D_1 [mm]	Recom. speed [RPM]		
	36	60	80	120	180	320				
	EAN 4007220									
CD system										
CD 20 A	-	265864	266007	266038	266052	266069	20	20.000 - 35.000	100	120
CD 25 A	-	355718	355725	355732	266083	266151	25	15.000 - 26.000	100	130
CD 38 A	355749	355756	355763	355770	266175	266199	38	10.000 - 16.000	100	250
CD 50 A	355787	355794	355800	355817	266212	266281	50	8.000 - 13.000	100	330
CD 75 A	355824	355831	355848	355855	266328	266359	75	5.000 - 9.000	50	380
CDR system										
CDR 20 A	-	778036	778043	778050	778074	778081	20	20.000 - 35.000	100	120
CDR 25 A	-	778098	778104	778111	778128	778135	25	15.000 - 26.000	100	130
CDR 38 A	596456	596463	596470	597255	597262	596500	38	10.000 - 16.000	100	250
CDR 50 A	596517	596524	596531	596548	596555	596562	50	8.000 - 13.000	100	330
CDR 75 A	596586	596593	596609	596616	596623	596630	75	5.000 - 9.000	50	380

COMBIDISC® abrasive discs Aluminium oxide A-FLEX



Particularly flexible abrasive disc A-FLEX aluminium oxide type, which is especially suitable for working on contours and concave surfaces.

For seamless transitions in the grinding pattern on metals. These tools are used in tool and mould construction.

Abrasive: Aluminium oxide A-FLEX

Recommendation for use:
It is recommended to use these discs with a soft holder to benefit fully from their flexibility.

Ordering example:
EAN 4007220**638897**
CD 50 A 120 FLEX

How to order:
CD = COMBIDISC® abrasive disc
50 = Dia. D_1 [mm]
A = Aluminium oxide A
120 = Grit size
Please state required grit size.
FLEX = Type

Order No.	Grit size			D_1 [mm]	Recom. speed [RPM]		
	60 FLEX	80 FLEX	120 FLEX				
	EAN 4007220						
CD system							
CD 38 A	638842	638859	638866	38	10.000 - 16.000	100	300
CD 50 A	638873	638880	638897	50	8.000 - 13.000	100	425
CD 75 A	638903	638910	638927	75	5.000 - 9.000	50	445
CDR system							
CDR 38 A	778166	778159	778173	38	10.000 - 16.000	100	300
CDR 50 A	778180	778210	778227	50	8.000 - 13.000	100	425
CDR 75 A	778241	778272	778296	75	5.000 - 9.000	50	445

The A-PLUS aluminium oxide type is universally suitable for all metals.

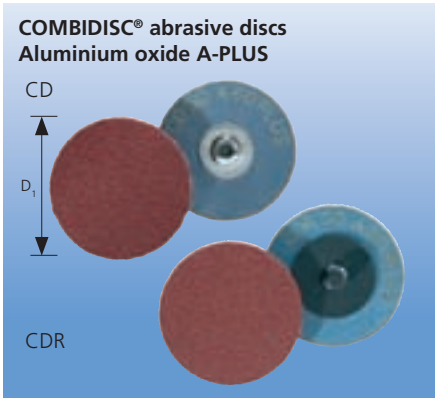
A stronger backing material ensures superior stock removal rates.
Preferred for use in edge grinding due to their outstanding tear resistance.

Abrasive: Aluminium oxide A-PLUS

Ordering example:
EAN 4007220**593653**
CD 50 A 120 PLUS

How to order:
CD = COMBIDISC® abrasive disc
50 = Dia. D_1 [mm]
A = Aluminium oxide A
120 = Grit size
Please state required grit size.
PLUS = Type

COMBIDISC® abrasive discs Aluminium oxide A-PLUS



Order No.	Grit size				D_1 [mm]	Recom. speed [RPM]		g
	36 PLUS	60 PLUS	80 PLUS	120 PLUS				
	EAN 4007220							
CD system								
CD 50 A	593608	593615	593622	593653	50	8.000 - 13.000	100	500
CD 75 A	593660	593677	593684	593691	75	5.000 - 9.000	50	540
CDR system								
CDR 50 A	778302	778319	778326	778333	50	8.000 - 13.000	100	500
CDR 75 A	778340	778357	778364	778371	75	5.000 - 9.000	50	540

The **midget fibre discs**, aluminium oxide A type, are perfect for surface and edge-grinding on metals.

The fibre backing reinforces the abrasive disc and improves stock removal.

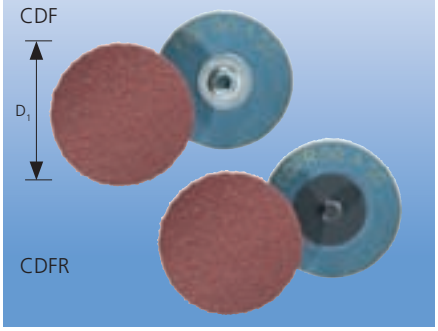
Abrasive: Aluminium oxide A

Recommendation for use:
Only use hard or medium-hard abrasive disc holders.
For work in hard-to-reach areas, CDF midget fibre discs (50 mm dia.) can also be mounted on small COMBIDISC® disc holders (ø 20 to 38 mm dia.).

Ordering example:
EAN 4007220**265826**
CDF 50 A 36

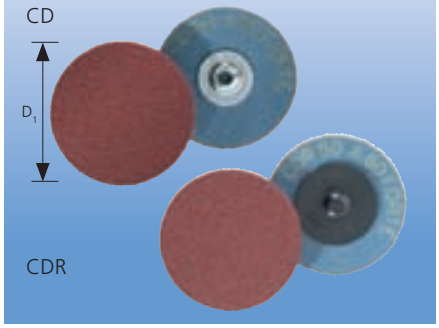
How to order:
CDF = COMBIDISC® midget fibre disc
50 = Dia. D_1 [mm]
A = Aluminium oxide A
36 = Grit size
Please state required grit size.

COMBIDISC® midget fibre discs Aluminium oxide A



Order No.	Grit size			D_1 [mm]	Recom. speed [RPM]		g
	36	50	80				
	EAN 4007220						
CD system							
CDF 50 A	265826	266854	266861	50	8.000 - 13.000	100	590
CDF 75 A	266878	266885	266892	75	5.000 - 9.000	50	690
CDR system							
CDFR 50 A	778807	778814	778821	50	8.000 - 13.000	100	590
CDFR 75 A	778838	778845	778852	75	5.000 - 9.000	50	690

COMBIDISC® abrasive disc Aluminium oxide A-Forte



The aluminium oxide A-Forte type is universally suitable on all metals.

High abrasive performance, cool grinding, long tool life.

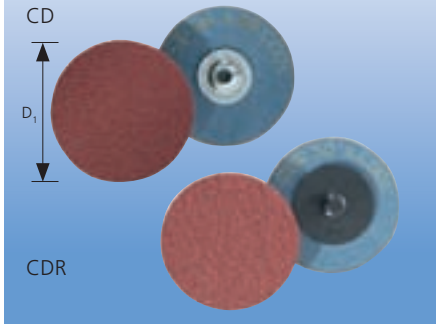
Abrasive: Aluminium oxide A-Forte

Ordering example:
EAN 4007220**265833**
CD 50 A 80 Forte

How to order:
CD = COMBIDISC® abrasive disc
50 = Dia. D_1 [mm]
A = Aluminium oxide A
80 = Grit size
Please state required grit size.
Forte = Bond type

Order No.	Grit size				D_1 [mm]	Recom. speed [RPM]		
	60 Forte	80 Forte	120 Forte	36 Forte				
	EAN 4007220							
CD system								
CD 25 A	265833	266021	266045	-	25	15.000 - 26.000	100	150
CD 38 A	266090	266106	266113	266076	38	10.000 - 16.000	100	300
CD 50 A	266137	266144	266168	266120	50	8.000 - 13.000	100	425
CD 75 A	266205	266229	266250	266182	75	5.000 - 9.000	50	445
CDR system								
CDR 25 A	778388	778395	778401	-	25	15.000 - 26.000	100	150
CDR 38 A	596661	596678	596685	596647	38	10.000 - 16.000	100	300
CDR 50 A	596708	596715	596722	596692	50	8.000 - 13.000	100	425
CDR 75 A	596746	596753	596760	596739	75	5.000 - 9.000	50	445

COMBIDISC® abrasive discs Aluminium oxide A-COOL



The A-COOL aluminium oxide type is suitable for use on tough materials such as stainless steel (INOX), Hastelloy, Inconel (Ni-Co-alloys) etc.

Grinding additives in the coating clearly improve stock removal, prevent clogging and allow cooler grinding.

Abrasive: Aluminium oxide A-COOL

Recommendation for use:
Only use hard or medium-hard abrasive disc holders.

Ordering example:
EAN 4007220**266458**
CD 75 A 60 A-COOL

How to order:
CD = COMBIDISC® abrasive disc
75 = Dia. D_1 [mm]
A = Aluminium oxide A
COOL = Bond type
60 = Grit size
Please state required grit size.

Order No.	Grit size			D_1 [mm]	Recom. speed [RPM]		
	36	60	80				
	EAN 4007220						
CD system							
CD 50 A-COOL	265840	266427	266434	50	8.000 - 13.000	100	455
CD 75 A-COOL	266441	266458	266465	75	5.000 - 9.000	50	515
CDR system							
CDR 50 A-COOL	596777	596784	596791	50	8.000 - 13.000	100	455
CDR 75 A-COOL	596807	596814	596821	75	5.000 - 9.000	50	515

The zirconia aluminia Z type is suitable for work on all hard metals.
These tools perform particularly well in coarse grinding applications using grit sizes 36 and 60.

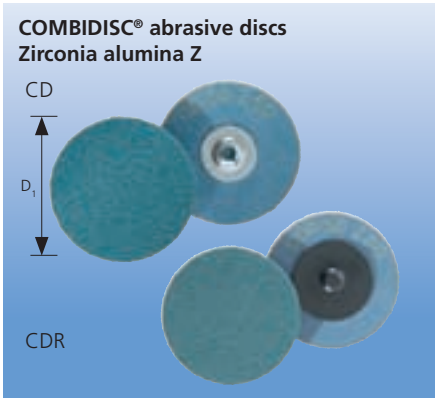
Abrasive: Zirconia alumina Z

Recommendation for use:
Only use hard or medium-hard abrasive disc holders.

Ordering example:
EAN 4007220**265857**
CD 50 Z 36

How to order:
CD = COMBIDISC® abrasive disc
50 = Dia. D_1 [mm]
Z = Zirconia alumina Z
36 = Grit size
Please state required grit size.

COMBIDISC® abrasive discs Zirconia alumina Z



Order No.	Grit size			D_1 [mm]	Recom. speed [RPM]		
	36	60	80				g
	EAN 4007220						
CD system							
CD 38 Z	778418	778425	778432	38	5.000 - 16.000	100	400
CD 50 Z	265857	266472	266519	50	3.800 - 13.000	100	505
CD 75 Z	266526	266533	266540	75	2.500 - 9.000	50	590
CDR system							
CDR 38 Z	778449	778456	778463	38	5.000 - 16.000	100	400
CDR 50 Z	596838	596845	596852	50	3.800 - 13.000	100	505
CDR 75 Z	596869	596876	596883	75	2.500 - 9.000	50	550

The silicon carbide SiC type is suitable for working on aluminium, copper, bronze, titanium, high-alloy steels and fibre reinforced plastics.

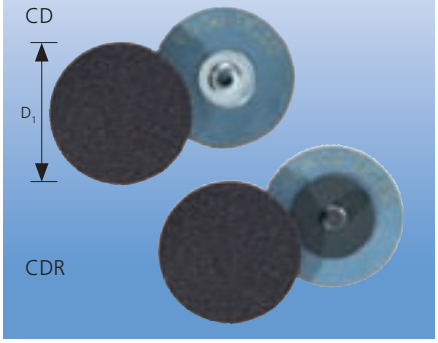
Particularly recommended for use on titanium alloys.
The tool of choice in the aircraft industry, specifically where SiC is the only approved abrasive product for use on engine components.

Abrasive: SiC (silicon carbide)

Ordering example:
EAN 4007220**441176**
CD 50 SiC 36

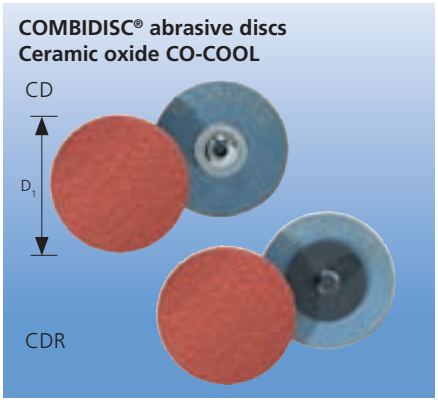
How to order:
CD = COMBIDISC® abrasive disc
50 = Dia. D_1 [mm]
SiC = Silicon carbide SiC
36 = Grit size
Please state required grit size.

COMBIDISC® abrasive discs Silicon carbide SiC



Order No.	Grit size					D_1 [mm]	Recom. speed [RPM]		
	36	60	80	120	240				g
	EAN 4007220								
CD system									
CD 50 SiC	441176	441183	441190	441206	441213	50	3.800 - 13.000	100	330
CD 75 SiC	441220	441237	441244	441251	441268	75	2.500 - 9.000	50	650
CDR system									
CDR 50 SiC	778470	778487	778494	778500	778517	50	3.800 - 13.000	100	330
CDR 75 SiC	778524	778548	778555	778562	778579	75	2.500 - 9.000	50	650

COMBIDISC® abrasive discs
Ceramic oxide CO-COOL



The ceramic oxide type CO-COOL is suitable for work on non-alloy and alloy steel parts, cast iron, stainless steel (INOX), titanium, nickel-based alloys and extremely hard materials.
Consistently high performance due to self-sharpening ceramic grit. Active additive fillers in the coating provide substantially improved abrasive performance while preventing loading and heat build-up.

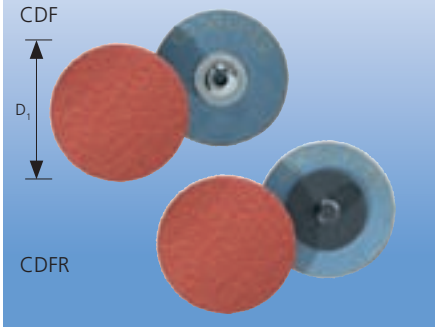
Abrasive: Ceramic oxide CO-COOL

Ordering example:
EAN 4007220**617922**
CD 50 CO-COOL 24

How to order:
CD = COMBIDISC® abrasive disc
50 = Dia. D_1 [mm]
CO = Ceramic oxide CO
COOL = Bond type
24 = Grit size
Please state required grit size.

Order No.	Grit size					D_1 [mm]	Recom. speed [RPM]		g
	24	36	60	80	120				
	EAN 4007220								
CD system									
CD 38 CO-COOL	770672	770689	770696	770702	770719	38	5.000 - 16.000	100	400
CD 50 CO-COOL	617922	617298	617304	617311	771365	50	3.800 - 13.000	100	500
CD 75 CO-COOL	617939	617328	617335	617342	771372	75	2.500 - 9.000	50	540
CDR system									
CDR 38 CO-COOL	778593	778609	778616	778623	778630	38	5.000 - 16.000	100	400
CDR 50 CO-COOL	778661	778678	778685	778692	778708	50	3.800 - 13.000	100	500
CDR 75 CO-COOL	778715	778722	778739	778746	778753	75	2.500 - 9.000	50	540

COMBIDISC® midget fibre discs
Ceramic oxide CO-COOL



Midget fibre discs are perfect for surface and edge-grinding. The fibre backing strengthens the abrasive disc and improves stock removal.

For highly-abrasive grinding with maximum stock removal on hard materials which do not conduct heat well such as stainless steel (INOX), Hastelloy, Inconel, titanium etc.

Grinding additives in the coating significantly improve stock removal, prevent clogging and allow cooler grinding.

Abrasive: Ceramic oxide CO-COOL

Ordering example:
EAN 4007220**778876**
CDF 50 CO-COOL 36

How to order:
CDF = COMBIDISC® midget fibre disc
50 = Dia. D_1 [mm]
CO = Ceramic oxide CO
COOL = Bond type
36 = Grit size
Please state required grit size.

Order No.	Grit size				D_1 [mm]	Recom. speed [RPM]		g
	36	50	80	120				
	EAN 4007220							
CD system								
CDF 50 CO-COOL	778876	778883	778890	779156	50	3.800 - 13.000	100	600
CDF 75 CO-COOL	779163	779170	779187	779194	75	2.500 - 9.000	50	700
CDR system								
CDFR 50 CO-COOL	779200	779217	779224	779231	50	3.800 - 13.000	100	600
CDFR 75 CO-COOL	779255	779262	779279	779286	75	2.500 - 9.000	50	700

COMBIDISC® diamond abrasive discs are perfect for working on wear-resistant plattings and for hard facings made of tungsten carbide, chromium carbide, titanium carbide etc.

Particularly recommended for work on materials used for engine construction e.g. Hastelloy, Inconel and titanium/titanium alloys.
Also suitable for work on extremely hard materials such as tungsten carbide, glass, ceramic, enamel, stone and GRP/CRP.

Abrasive: Diamond
D 251 = P 60, D 126 = P 120, D 76 = P 220
P = Grit size according to ISO 6344

Recommendation for use:
Diamond abrasive discs perform best at the recommended cutting speed of 10-20 m/s.

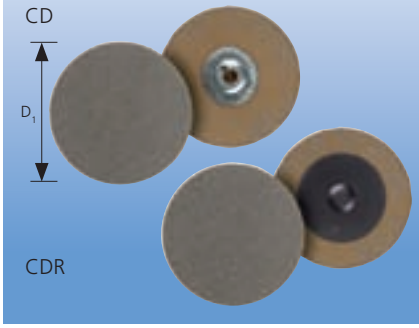
Ordering note:
The grit sizes are given in µm.
Please refer to catalogue 205 for detailed information and order data on grinding tools with diamond.

Ordering example:
EAN 4007220**750377**
CD DIA 50 D 126

How to order:

CD DIA	= COMBIDISC® diamond abrasive disc
50	= Dia. D_1 [mm]
D	= Diamond abrasive D
126	= Grit size in µm Please state required grit size.

COMBIDISC® diamond abrasive discs



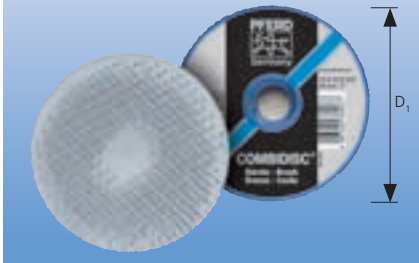
Order No.	Grit size			D_1 [mm]	Recom. speed [RPM]		
	251	126	76				
	EAN 4007220						
CD system							
CD DIA 25 D	750292	750315	750322	25	7.500 - 15.000	10	30
CD DIA 38 D	750339	750346	750353	38	5.000 - 10.000	10	40
CD DIA 50 D	750360	750377	750384	50	3.800 - 7.500	10	60
CD DIA 75 D	750391	750407	750414	75	2.500 - 5.000	10	140
CDR system							
CDR DIA 25 D	750421	750438	750445	25	7.500 - 15.000	10	30
CDR DIA 38 D	750452	750469	750476	38	5.000 - 10.000	10	40
CDR DIA 50 D	750483	750490	750506	50	3.800 - 7.500	10	60
CDR DIA 75 D	750513	750520	750537	75	2.500 - 5.000	10	140

Suitable for removal of soft materials such as adhesive, underbody coatings and for cleaning contours and edges.

Recommendation for use:
Use either the SBH 50 abrasive disc holder or the BO PFF 50 arbor.
COMBIDISC® brushes perform best at the recommended peripheral speed of 10-15m/s.

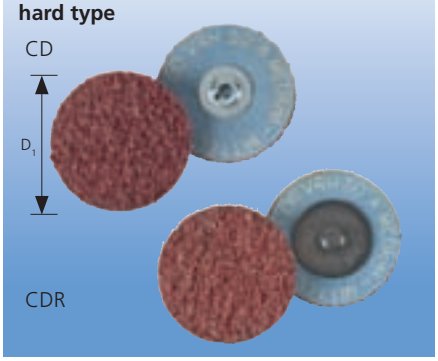
Ordering note:
Please refer to catalogue 208 for detailed information and order data on the technical brushes.

COMBIDISC® brush



Order No.	EAN 4007220	Wire material	Wire dia. d_6 [mm]	D_1 [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable arbor		
CD system									
CD-B 50 ST 0,35	780077	Stahl	0,35	50	5.000 - 6.000	19.100	BO PFF 50	5	125

COMBIDISC® non-woven discs hard type



Suitable for general work on metal surfaces e.g. removal of rough grinding traces, removal of oxidation and for light deburring work.

The flexibility of the disc during surface grinding is determined by hardness grade of the holder.

Abrasive: Aluminium oxide A

Available grit sizes:
Coarse = Yellowish-brown
Medium = Red-brown
Very fine = Blue

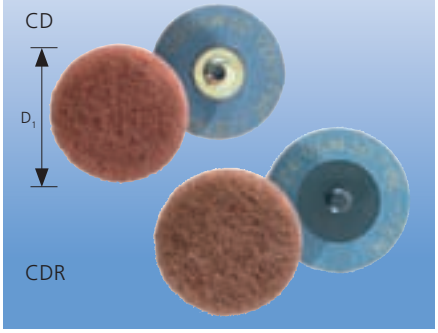
Recommendation for use:
The quality of the surface finish, the cooler grind and tool life can be further improved by adding grinding oil or water.

Ordering example:
EAN 4007220**266571**
CD VRH 25 A very fine

How to order:
CD VRH = COMBIDISC® non-woven disc hard
25 = Dia. D_1 [mm]
A = Aluminium oxide
SF = Grit size very fine
Please state required grit size.

Order No.	Grit size			D_1 [mm]	Recom. speed [RPM]		
	very fine	coarse	medium				
	EAN 4007220						
CD system							
CD VRH 20 A	265871	-	-	20	14.000 - 19.000	50	85
CD VRH 25 A	266571	268865	266564	25	11.000 - 15.000	50	115
CD VRH 38 A	268872	266588	266595	38	7.000 - 10.000	50	240
CD VRH 50 A	266632	266618	266625	50	5.500 - 7.500	50	360
CD VRH 75 A	266663	266649	266656	75	3.800 - 5.000	25	410
CDR system							
CDR VRH 38 A	596920	596906	596913	38	7.000 - 10.000	50	240
CDR VRH 50 A	596951	596937	596944	50	5.500 - 7.500	50	360
CDR VRH 75 A	597354	596968	596975	75	3.800 - 5.000	25	410

COMBIDISC® non-woven discs soft type



For ultra-fine surface and contour grinding and cleaning of metal or painted surfaces. Highly open structure.

Abrasive: Aluminium oxide A

Recommendation for use:
The quality of the surface finish, the cooler grind and tool life can be further improved by adding grinding oil or water.

Ordering example:
EAN 4007220**266687**
CD VRW 50 A Fine

How to order:
CD VRW = COMBIDISC® non-woven disc soft
50 = Dia. D_1 [mm]
A = Aluminium oxide A
F = Grit size fine
Please state required grit size.

Order No.	Grit size			D_1 [mm]	Recom. speed [RPM]		
	medium	fine	very fine				
	EAN 4007220						
CD system							
CD VRW 50 A	266670	266687	266694	50	5.500 - 7.500	50	340
CD VRW 75 A	266717	266724	266731	75	3.800 - 5.000	25	350
CDR system							
CDR VRW 50 A	596999	597002	597019	50	5.500 - 7.500	50	340
CDR VRW 75 A	597026	597033	597040	75	3.800 - 5.000	25	350

The aluminium oxide A type perform well in general-purpose coarse grinding applications. They deliver high stock removal rates on diverse materials.

Ideal for weld dressing in hard-to-reach areas.

These tools excel in performance when compared to plain coated abrasive discs in terms of longevity and grinding performance.

Approved according to EN 13743 for max. 50 m/s.

Abrasive: Aluminium oxide A

Ordering note:
Alternative tool holder for:
CD PFF 50 – COMBIDISC® holder SBH 20 – 50
CD PFF 75 – COMBIDISC® holder SBH 75

Ordering example:
EAN 4007220**617359**
CD PFF 50 A

How to order:
CD = COMBIDISC®
PFF = Mini-POLIFAN®
50 = Dia. D_1 [mm]
A = Aluminium oxide A
40 = Grit size
Please state required grit size.

COMBIDISC® Mini-POLIFAN®
Aluminium oxide A

Order No.	Grit size				D_1 [mm]	Recom. speed [RPM]	Suitable arbor		
	40	60	80	120					g
	EAN 4007220								
CD system									
CD PFF 50 A	617359	617366	617373	617380	50	12.000 - 14.000	BO PFF 50	10	180
CD PFF 75 A	617397	617403	617410	617625	75	8.000 - 10.000	BO PFF 75	10	390

The zirconia aluminia Z type perform well in general-purpose grinding applications, providing ultra-high stock removal.

Particularly suitable for weld dressing in hard-to-reach areas.

These tools excel in performance when compared to plain coated abrasive discs in terms of longevity and grinding performance.

Approved according to EN 13743 for max. 50 m/s.

Abrasive: Zirconia aluminia Z

Ordering note:
Alternative tool holder for:
CD PFF 50 – COMBIDISC® holder SBH 20 – 50
CD PFF 75 – COMBIDISC® holder SBH 75

Ordering example:
EAN 4007220**592717**
CD PFF 50 Z 40

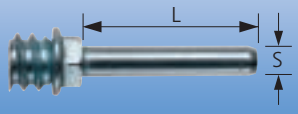
How to order:
CD = COMBIDISC®
PFF = Mini-POLIFAN®
50 = Dia. D_1 [mm]
Z = Zirconia alumina
40 = Grit size
Please state required grit size.

COMBIDISC® Mini-POLIFAN®
Zirconia aluminia Z

Order No.	Grit size				D_1 [mm]	Recom. speed [RPM]	Suitable arbor		
	40	60	80	120					g
	EAN 4007220								
CD system									
CD PFF 50 Z	592717	592724	592731	592748	50	12.000 - 14.000	BO PFF 50	10	180
CD PFF 75 Z	592755	592762	592779	592786	75	8.000 - 10.000	BO PFF 75	10	390

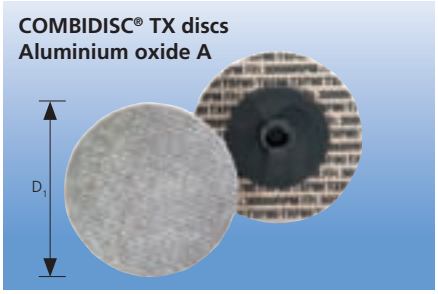
Suitable arbor for COMBIDISC® Mini-POLIFAN® and COMBIDISC® brushes.

Arbor
for COMBIDISC® Mini-POLIFAN® and COMBIDISC® brush



Order No.	EAN 4007220	S x L [mm]	Suitable tool		g
BO PFF 50	593196	6 x 40	CD PFF 50, CD-B 50 ST 0.35	1	16
BO PFF 75	593202	6 x 40	CD PFF 75	1	18

COMBIDISC® TX discs Aluminium oxide A



COMBIDISC® TX discs achieve surface finishing in a single grinding operation which, in terms of quality, lies between that of coated abrasives and non-woven tools.
They are particularly suitable for work on stainless steel (INOX) and aluminium.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**505731**
CD 50 A 80 TX

How to order:
CD = COMBIDISC®
50 = Dia. D_1 [mm]
A = Aluminium oxide A
80 = Grit size
Please state required grit size.
TX = Bond type

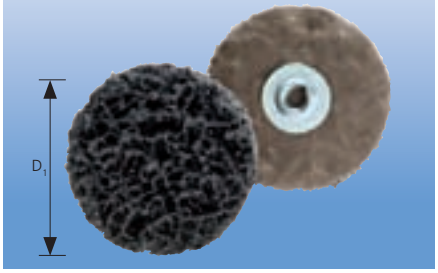
Order No.	Grit size				D_1 [mm]	Recom. speed [RPM]		
	36 TX	80 TX	120 TX	320 TX				
	EAN 4007220							
CD system								
CD 50 A	505724	505731	505748	505755	50	7.500 - 9.500	25	425
CD 75 A	505786	505793	505809	505816	75	5.000 - 6.500	25	650

COMBIDISC® felt discs

Suitable for polishing with the polishing paste bars, grinding pastes or diamond polishing pastes in face grinding on medium-sized surfaces.

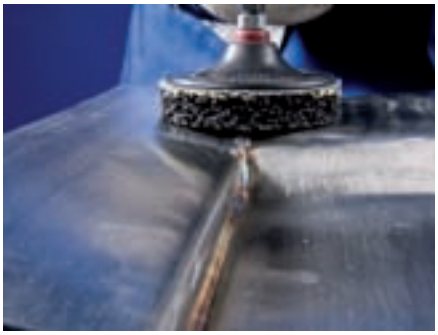
Order No.	EAN 4007220	D_1 [mm]	Recom. speed [RPM]		
CD system					
CD FR 50	440490	50	2.000 - 4.000	10	80
CD FR 75	440506	75	1.200 - 2.500	10	165

COMBIDISC® POLICLEAN® discs



For coarse cleaning work, paint removal, forging scale, rust and adhesive residues in face grinding.

Recommendation for use:
Use either the hard or medium-hard COMBIDISC® abrasive disc holders.

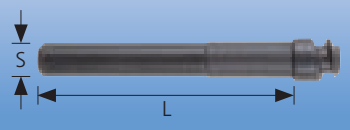


Order No.	EAN 4007220	D_1 [mm]	Recom. speed [RPM]		
CD system					
CD 50 PCLR	471500	50	5.500 - 8.000	10	150
CD 75 PCLR	471517	75	3.800 - 5.000	10	320

Specifically designed for slot grinding applications, e.g. cost-efficient cleaning and rust removal of seat mounting rails (tracks) in passenger aircraft.

Special feature:
The purpose-designed arbor (STS 6) imparts an orbital ("wobble") movement to coated abrasive or non-woven discs.

COMBIDISC® track grinder



Order No.	EAN 4007220	S x L [mm]	Suitable tool		g
STS 6	265895	6 x 40	CD 20, CD 25	1	13

For getting to know and testing the comprehensive system.

Contents COMBIDISC® SET 50:
3 abrasive discs each:
CD 50 A 36 Forte
CD 50 A 60 Forte
CD 50 A 120 Forte
CD 50 A-COOL 60
CD 50 Z 60
3 COMBIDISC® non-woven discs each:
CD VRH 50 Medium
CD VRW 50 Medium
1 abrasive disc holder, medium-hard SBH 50 M

Contents COMBIDISC® Set 75:
3 abrasive discs each:
CD 75 A 36 Forte
CD 75 A 60 Forte
CD 75 A 120 Forte
CD 75 A-COOL 60
CD 75 Z 60
3 COMBIDISC® Non-woven discs each:
CD VRH 75 Medium
CD VRW 75 Medium
1 abrasive disc holder, medium-hard SBH 75 M

COMBIDISC® sets

Order No.	EAN 4007220		g
SET 50	265918	1	215
SET 75	265932	1	520

Tool Sets
Tool Sets with Drives

Ideal for all coarse and fine-grinding, polishing and cleaning tasks, especially on assembly and construction sites. Convenient and easy to use, supplied with a full assortment of tools.

Electric angle grinder with electronic speed range adjustment. Superb work with this easy-to-use single-hand angle grinder which covers all speed ranges for COMBIDISC® with ø 50 mm.

Please refer to catalogue 209 for detailed tool drive information and ordering data.

Contents:
- 1 electric angle grinder UWER 5/200 SI with electronic speed range control (9.000-20.000 RPM), 500 watts power output.
- 4 abrasive backing pads and 2 arbors for alternative tool drives.
- 135 different abrasive discs, TX discs, Mini-POLIFAN®, Non-woven and felt discs in ø 50 mm.
- Polishing paste bar for use with felt discs.

COMBIDISC® set CD 50 UWER 5/200 230 V

Order No.	EAN 4007220		g
SET CD 50 UWER 5/200 230 V	607893	1	4.057

ATADISC® are flexible grinding tools for surface treatment. From coarse grinding to finest grinding; even complicated processing problems can be solved using this product.

The ATADISC® tool systems proven brilliance it due to the lightweight backing pads which are particularly cost-efficient hence their modular snap-in design. Tool changes are made very easy by a bayonet-type metal/plastic assembly mechanism. The abrasive disc is mounted by a simple clockwise twist and removed by a corresponding counterclockwise movement.

Advantages

- Easy to use.
- Rapid tool change.
- No adhesion problems.
- Firmly secured disc.
- Disc does not become detached under influence of heat.
- Vibration-free operation due to perfectly centralized tool.
- Tools from 20-75 mm dia. in various grit-types and sizes.

Recommendations for use

The use of the appropriate grinding oil on the different materials can substantially increase the tool life and the abrasive performance of tools made from coated abrasive. For detailed information and order data regarding grinding oils, please refer to page 110.

Application examples

- Tool and mould construction.
- Model construction.
- Machine engineering.
- Vehicle construction.
- The aviation and aerospace industries.
- Engine construction and repairs.
- Container and apparatus construction (e.g. for the foodstuffs and chemical industries).

Safety notes

- The maximum permissible peripheral speed is 80 m/s.
- For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Safety recommendations

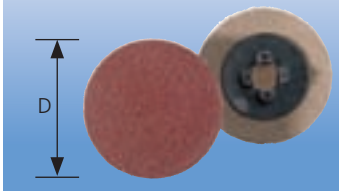
= Wear eye protection!

= Wear hearing protection!

= Wear gloves!

= Read the instructions!

ATADISC® abrasive discs
Aluminium oxide A



The aluminium oxide A type is suitable for general grinding work on metals and other materials.

Abrasive: Aluminium oxide A

Ordering note:
AD 2005, AD 2505, AD 3505-2, matching to hub SP 20.
AD 3505, AD 5005, AD 7505, matching to hub SP 35.

Ordering example:
EAN 4007220**355909**
AD 3505 A 80

How to order:

AD	= ATADISC®
3505	= Dia. D_1 x thickness T [mm]
A	= Aluminium oxide A
80	= Grit size
	Please state required grit size.

Order No.	Grit size						D_1 [mm]	Recom. speed [RPM]		9
	36	60	80	120	180	320				
	EAN 4007220									
AD 2005 A	-	151846	355978	151853	151860	151877	20	20.000 - 35.000	50	38
AD 2505 A	-	151884	355879	151891	151907	151914	25	15.000 - 26.000	50	50
AD 3505-2 A	-	151969	355886	151976	151983	151990	35	10.000 - 16.000	50	107
AD 3505 A	355893	151921	355909	151938	151945	151952	35	10.000 - 16.000	50	107
AD 5005 A	355916	152003	355923	152010	152027	152034	50	8.000 - 13.000	50	187
AD 7505 A	355930	152065	355947	152072	152089	152096	75	5.000 - 9.000	50	382

Adapters

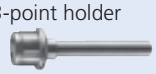
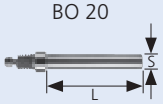
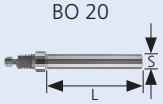
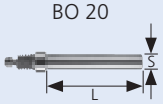
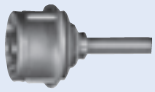
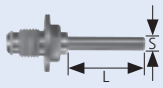
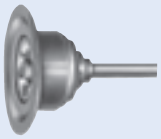
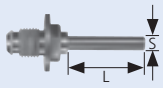
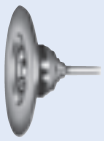
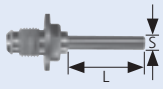
AF 14/35

The BO 35 arbor can be replaced by a suitable adapter. This can be used to mount the abrasive disc holder directly onto the drive spindle.

AF 10/35 with M10 female thread for machines with M10 spindle.

AF 14/35 with M14 female thread for machines with M14 spindle.

Please refer to catalogue 209 for detailed information and order data regarding the adapters.

Abrasive disc type	Matching abrasive disc holder	Order No. complete	Shank dia. S [mm]	Component and order number				
				Arbor	Hub	Backing pad (flexible)	Max. allowed speed [min^{-1}]	Backing pad hard (firm)
AD 2005 AD 2505 AD 3505-2	3-point holder 	**SH 2000**	6	BO 20 	SP 20 	-	-	-
AD 2505 AD 3505-2	3-point holder 	**SHT 2025**	6	BO 20 	SP 20 	ST 25 	60.000	ST 25 H 
AD 3505-2	3-point holder 	**SHT 2035**	6	BO 20 	SP 20 	ST 35 	43.000	ST 35 H 
AD 3505 AD 5005 AD 7505	4-point holder 	**SH 3500**	6	BO 35 	SP 35 	-	-	-
AD 5005 AD 7505	4-point holder 	**SHT 3550**	6	BO 35 	SP 35 	ST 50 	30.000	ST 50 H 
AD 7505	4-point holder 	**SHT 3575**	6	BO 35 	SP 35 	ST 75 	20.000	ST 75 H 

Order No.	EAN 4007220	S x L [mm]		g
SH 2000	151594	6 x 32	1	18
SHT 2025	151624	6 x 32	1	28
SHT 2035	151631	6 x 32	1	22
SH 3500	151679	6 x 32	1	52
SHT 3550	151716	6 x 32	1	58
SHT 3575	151723	6 x 32	1	69
BO 20	151600	6 x 32	1	15
SP 20	151617	-	1	7
ST 25	151730	-	1	6
ST 25 H	151778	-	1	6
ST 35	151747	-	1	7
ST 35 H	151785	-	1	8
BO 35	151686	6 x 32	1	38
SP 35	151693	-	1	10
ST 50	151754	-	1	11
ST 50 H	151792	-	1	9
ST 75	151761	-	1	20
ST 75 H	151808	-	1	22

PFERD offers a comprehensive range of short belts.

They differ in:
- Dimensions,
- grit sizes,
- flexibility and
- abrasives used.

The PFERD product range is aligned to the standard belt grinders available in the market.

PFERD short belts are designated as "Abrasive belts" according to ISO 2976.

Advantages

- High abrasive performance.
- High tensile strength with appropriate flexibility.
- Excellent grit adhesion.
- Long tool life.

Application examples

- Fine-grinding of larger surfaces in multiple steps.
- Surface texturing.
- Creation of uniform visual effects on large surfaces

Recommendations for use

For the application recommendations for different operating conditions and the allocation to the power sources, please refer to the following pages.
The use of the appropriate grinding oil on the different materials can substantially increase tool life and the abrasive performance of tools made from coated abrasives. For detailed information and order data regarding grinding oils, please refer to page 110.

Safety note

VDS safety guidelines (Verband deutscher Schleifmittelwerke: Association of German Abrasive Manufacturers). Observe the "Safety guidelines for the correct use of abrasive belts". You can find this information on our homepage, www.pferd.com.

Safety recommendations

 = Wear eye protection!

 = Wear gloves!

 = Wear hearing protection!

 = Wear a respirator!

 = Read the instructions!

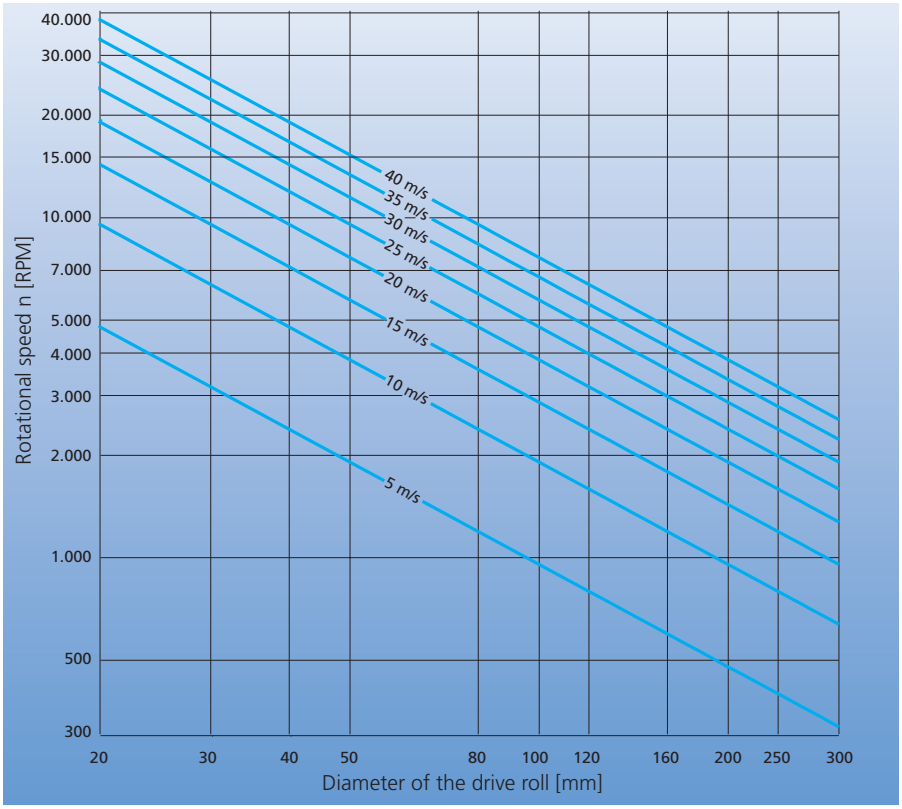
 = Not permitted for wet grinding!

Cutting speed Short and long belts

For the recommended cutting speeds [m/s], please refer to the application recommendations for the use of short and long belts.

In the adjacent diagram, the cutting speeds are represented through diagonal lines.

The vertical line representing the tool diameter meets the given cutting speed (diagonals). From its point of intersection proceed horizontally to the left margin where you will find the corresponding recommended rotational speed [RPM] of the drive roll.



Application recommendations for use of long/short abrasive belts

Material groups			Application	Surface roughness	Grit size	Recom. abrasive grit	Recom. cutting speed [m/s]
Steel, cast steel	Non-hardened, non-heat treated steels up to 1200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steels	coarse grinding fine grinding very fine grinding	coarse ▼ fine	coarse ▼ fine	Aluminium oxide A fleece	25-35
	Hardened, heat-treated steels exceeding 1200 N/mm² (> 38 HRC)	Tool steels, tempered steels, alloyed steels, cast steels	coarse grinding fine grinding very fine grinding	coarse ▼ fine	coarse ▼ fine	Aluminium oxide A Z-Zirconia alumina fleece	20-30
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	coarse grinding fine grinding very fine grinding	coarse ▼ fine	coarse ▼ fine	CO-COOL A-COOL fleece	15-25
Non-ferrous metals	Soft non-ferrous metals	Alu-alloys, brass, copper, zinc	coarse grinding fine grinding very fine grinding	coarse ▼ fine	coarse ▼ fine	Aluminium oxide A fleece	30-40
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, aluminium alloys (high Si content)	coarse grinding fine grinding very fine grinding	coarse ▼ fine	coarse ▼ fine	CO-COOL Aluminium oxide A fleece	20-30
	High-temperature resistant materials	Nickel based alloys, cobalt based alloys (aircraft engine and turbine construction)	coarse grinding fine grinding very fine grinding	coarse ▼ fine	coarse ▼ fine		5-15
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL, with nodular graphite cast iron EN-GJS, white annealed cast iron EN-GJMW, black cast iron EN-GJMB	coarse grinding fine grinding very fine grinding	coarse ▼ fine	coarse ▼ fine	Aluminium oxide A	25-35
Plastics and other materials	Plastics, wood, paint	Fibre-reinforced plastics, thermoplastics, woods, chipboard, paint, melamine	coarse grinding fine grinding very fine grinding	coarse ▼ fine	coarse ▼ fine	Aluminium oxide A	10-25

Belt grinder / abrasive belt compatibility table

Manufacturer	Model	Abrasive belts Length/ Width [mm]
PFERD	**Compressed air belt grinder**	
	PBS 3/200 DH 99	BA 3/305 BA 6/305 BA 9/305 BA 12/305
	PBSA 5/210 HV 925	BA 3/520 BA 6/520 BA 12/520 BA 16/520 BA 20/520 BA 6/610 BA 12/610
	PBSA 5/160 HV 925	
	PBSA 5/130 HV 925	
	PBSA 9/120 HV 925	
	PBS 5/155 HV	BA 6/610 BA 10/480 BA 16/480 BA 20/480 BA 25/480 BA 12/610
	Electric belt grinders	
	UBS 5/100 SI 925	BA 3/520 BA 6/520 BA 12/520 BA 16/520 BA 20/520 BA 6/610 BA 12/610
	Pipe belt grinders	
	UBS 5/70 SI-R UBS 11/90 SI-R	BA 30/533 BA 30/610
	Belt sander BSG for flexible shaft drives	
	BSG 10/35E	BA 35/450
	BSG 10/50E	BA 50/450
	BSG 3/10/40	BA 40/505
	Angle hand pieces	
	WT 7 E M14 + BSVH 41	BA 3/520 BA 6/520 BA 12/520 BA 16/520 BA 20/520 BA 6/610 BA 12/610
	WZ 7 B + BSVH 36	
	WZ 10 B + BSVH 36	
	WZ 4 A +BSVH 24	BA 3/305 BA 6/305 BA 9/305 BA 12/305
AEG	BBS1100	BA 100/560
	BBSE1100	
	HBS100	BA 100/560
	HBSE100	
	HBSE2110	BA 100/620
	HBSE755	BA 75/533
	RBSE75AE	

Manufacturer	Model	Abrasive belts Length/ Width [mm]
Atlas Copco	BBS100	BA 100/620
	BBSE100	
	HBSE75	BA 75/533
	MBSE705	
ATA	RAL15L	BA 10/480 BA 16/480 BA 20/480 BA 25/480
Belton	20	BA 20/520
Black& Decker	405	BA 100/560
	KA 75 E	BA 75/533
	KA 75	
Bosch	270	BA 75/533
	1270	BA 100/620
	GBS100A	
	GBS100AE	
	PBS75	BA 75/533
	PBS75-E	
	PBS75A	
	PBS75AE	
	GBS75AE	
DeWalt	DW431	
Dynabrade	11000	BA 6/610 BA 12/610
	11142	
	40320	
	40330	
	40335	
	40500	
ELU	MHB-50	BA 100/560
	MHB-90	
	MHB-90E	
	MHB-90K	
Festo	BUZ-S	BA 100/560
Greif	D30HFS100	BA 50/2000 BA 75/2000
	D30-2-2	
Hitachi	SB10T	BA 100/610
	SB10V	
	SB-75	BA 75/533
	SB110	BA 110/620
	9924 DB	BA 75/610
Holz-Her	2210	BA 110/620
	2410	BA 75/533
	2411	
	2420	
	2422	BA 100/620
	2423	
	2424	
Mafell	ZUB 1110	BA 110/620

Manufacturer	Model	Abrasive belts Length/ Width [mm]
Makita	9901	BA 75/533
	9900	
	9910 / 9911	BA 75/457
	9402	BA 100/610
	9924DB	
Metabo	Ba0775	BA 75/533
	Ba0875	
	BaE0876Signal	
	Ba6100	BA 100/610 BA 100/620
	BaE1075	BA 75/533
Niederberger	P2/P5	BA 50/2500 BA 75/2500
Rodac	8400	BA 20/520
Ryobi	B422	BA 100/560
	B850F	BA 75/533
	B7200A	BA 100/610
	BE 422	BA 100/560
	BE424	BA 100/610 BA 100/620
	BE 7076	BA 75/533
Scheppach	BSM 2010	BA 150/2000
SKIL	400H	BA 100/560
	405H	
	445H	
	594U	BA 75/533
	595U	
	805H	BA 100/560
	1100	BA 75/457
	1200	
	1205	
	1200 H	
	1205 H	
Suhner	BSG10/35	BA 35/450
	BSG10/50	BA 50/450
	BSG3/10/40	BA 40/505
	BSGV35	BA 35/450
	BSGV50	BA 50/450
	LWC16Top	BA 6/520 BA 12/520 BA 16/520 BA 20/520
	LWC21	
	LWG11	
	UBC10-R	BA 6/520 BA 12/520 BA 16/520 BA 20/520 BA 6/610 BA 12/610
	UTC7-R	BA 6/520 BA 12/520 BA 16/520 BA 20/520

Suitable for coarse and fine grinding on metals and wood.

Abrasive: Aluminium oxide A

Ordering note:
The short belts
BA 75/533 A 100
BA 100/560 A 100
are supplied in a packaging unit containing 20 pcs.

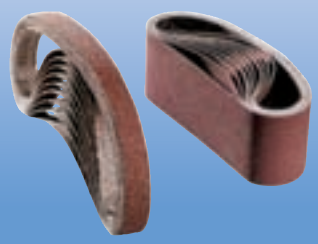
Please take the short belt dimensions (width T x length L [mm]) from the order no.

Ordering example:
EAN 4007220**585269**
BA 10/480 A 80

How to order:

BA	= Abrasive belt
12	= Width T [mm]
480	= Length L [mm]
A	= Aluminium oxide A
40	= Grit size
	Please state required grit size.

Short belts
Aluminium oxide A type



Order No.	Grit size											Acc. to ISO standards		g
	40	50	60	80	100	120	150	180	240	320	400			
	EAN 4007220													
BA 3/305 A	-	-	663899	663905	-	663912	-	663929	-	-	-	-	100	100
BA 6/305 A	-	-	664025	664032	-	664049	-	664056	-	-	-	-	100	200
BA 9/305 A	-	-	664179	664186	-	664193	-	664209	-	-	-	-	100	350
BA 12/305 A	664261	-	664278	664285	-	664445	-	664292	664308	664315	-	-	100	450
BA 10/330 A	-	-	620151	620168	-	620182	-	620199	-	-	-	2976	100	800
BA 12/330 A	-	-	620229	-	-	-	-	-	-	-	-	-	100	800
BA 35/450 A	-	-	585665	-	585672	-	-	-	664704	664711	-	-	10	200
BA 50/450 A	585719	-	585726	-	585733	-	-	-	664766	664773	-	2976	10	230
BA 13/457 A	620267	-	620274	620298	-	620304	-	-	-	-	-	2976	100	600
BA 75/457 A	600337	-	600351	600368	600375	600399	-	-	-	-	-	2976	20	590
BA 10/480 A	585542	-	585252	585269	-	585559	-	664247	664254	-	-	-	100	470
BA 16/480 A	585597	-	585368	585375	-	585382	-	664384	664391	-	-	-	50	400
BA 20/480 A	585610	664520	585429	585436	-	585443	664537	664544	664551	-	-	2976	10	150
BA 25/480 A	585634	-	585481	585498	-	585641	-	-	-	-	-	2976	20	380
BA 3/520 A	663950	-	663967	663974	-	663981	-	663998	664001	-	-	-	100	220
BA 6/520 A	585528	-	585191	585207	-	585214	-	664124	664131	664148	664155	2976	100	500
BA 12/520 A	585573	-	585306	585313	-	585320	-	664322	664339	664346	664353	-	100	1.000
BA 16/520 A	585603	-	585399	585405	-	585412	-	664407	664414	-	-	-	50	350
BA 20/520 A	585627	-	585450	585467	-	585474	-	664568	664575	-	-	2976	20	200
BA 30/533 A	620359	-	620380	620397	-	620410	-	664667	664674	664681	-	2976	20	350
BA 75/533 A	584958	-	584965	584972	-	584989	-	-	-	-	-	2976	10	350
BA 75/533 A	-	-	-	-	600429	-	-	-	-	-	-	2976	20	350
BA 100/560 A	584996	-	585009	585016	-	585023	-	-	-	-	-	2976	10	450
BA 100/560 A	-	-	-	-	600443	-	-	-	-	-	-	2976	20	450
BA 6/610 A	585535	-	585221	585238	-	585245	-	-	-	-	-	2976	100	300
BA 12/610 A	585580	-	585337	585344	-	585351	-	-	-	-	-	-	100	600
BA 30/610 A	776414	-	776421	776438	-	776445	-	776452	776469	776476	-	-	10	290
BA 100/610 A	585030	-	585047	585054	600467	585061	-	-	-	-	-	2976	10	500
BA 100/620 A	585085	-	585092	585108	600474	585115	-	-	-	-	-	2976	10	520
BA 100/920 A	620786	-	620793	620809	-	620823	-	-	-	-	-	-	10	1.000

Short belts
Zirconia alumina Z type

Suitable for work on steel, stainless steel (INOX), non-ferrous metals and cast iron with flake graphite.

For heavy-duty use and maximum stock removal.

Abrasive: Zirconia alumina Z

Ordering note:
The short belt BA 20/520 Z 36 is supplied in a packaging unit with 100 pcs.

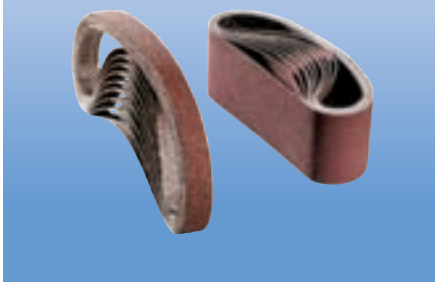
Ordering example:
EAN 4007220**620205**
BA 10/330 Z 40

How to order:

BA	= Abrasive belt
10	= Width T [mm]
330	= Length L [mm]
Z	= Zirconia alumina Z
40	= Grit size
	Please state required grit size.

Order No.	Grit size				Acc. to ISO standards	Width x length T x L [mm]		g
	36	40	60	80				
	EAN 4007220							
BA 10/330 Z	-	620205	620212	-	2976	10 x 330	100	500
BA 12/330 Z	-	-	620236	620250	-	12 x 330	100	450
BA 20/480 Z	-	586297	586235	586242	2976	20 x 480	10	160
BA 12/520 Z	-	586273	586198	586204	-	12 x 520	100	1.100
BA 20/520 Z	620342	-	-	-	2976	20 x 520	100	1.700
BA 20/520 Z	-	586303	586259	586310	2976	20 x 520	20	250
BA 12/610 Z	-	586280	586211	586228	-	12 x 610	100	750

Short belts
A-COOL type



Suitable for work on stainless steel (INOX) and high-temperature materials.

The A-COOL type contains active additives resulting in a significant reduction of thermal loads and a finer surface finish.

Abrasive: Aluminium oxide A-COOL

Ordering example:
EAN 4007220**585993**
BA 35/450 A-COOL 40

How to order:

BA	= Abrasive belt
35	= Width T [mm]
450	= Length L [mm]
A	= Aluminium oxide A
INOX	= Bond type
40	= Grit size
	Please state required grit size.

Order No.	Grit size				Acc. to ISO standards	Width x length T x L [mm]		g
	40	80	120	180				
	EAN 4007220							
BA 35/450 A-COOL	585993	586013	586020	586037	-	35 x 450	10	270
BA 50/450 A-COOL	586099	586105	586112	586129	2976	50 x 450	10	390
BA 40/505 A-COOL	586044	586051	586068	-	-	40 x 505	10	350
BA 30/610 A-COOL	776483	776490	776506	776513	-	30 x 610	10	290

For aggressive grinding with maximum stock removal on hard materials which do not conduct heat well.

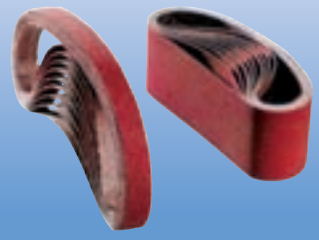
Grinding additives in the coating clearly improve stock removal, prevent clogging and allow cooler grinding.

Abrasive: Ceramic oxide CO-COOL

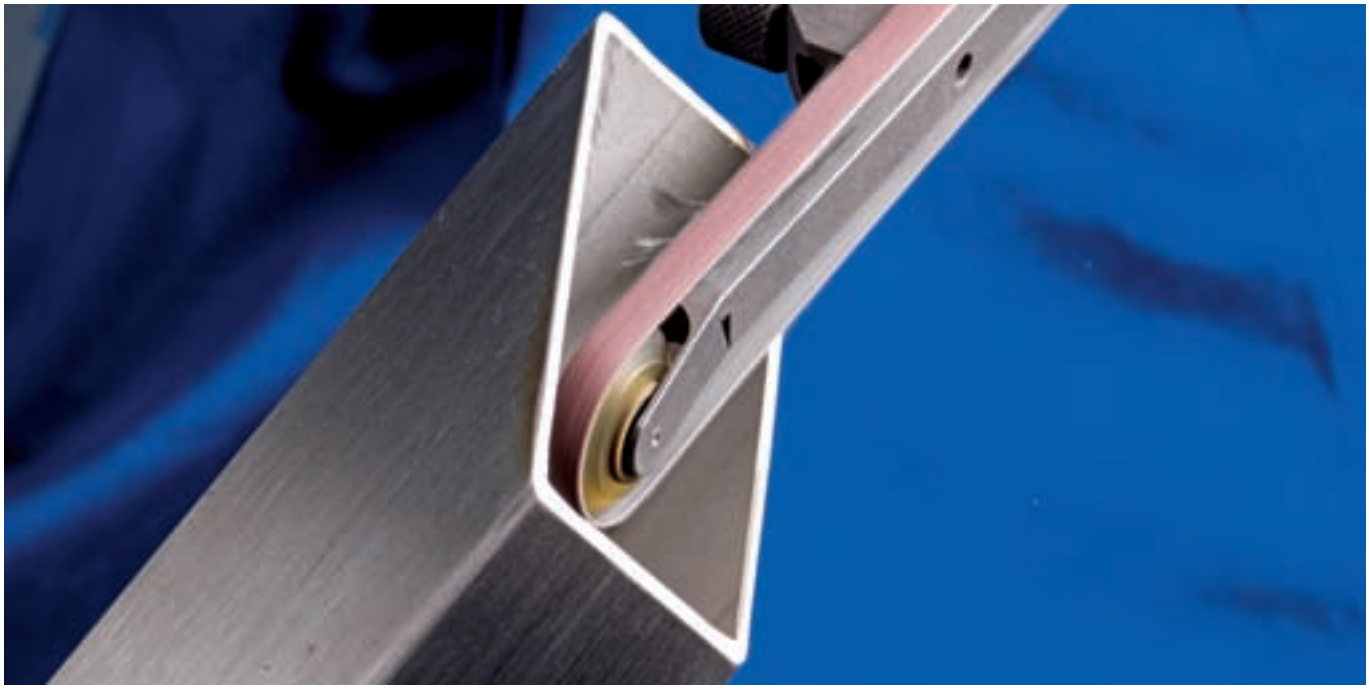
Ordering example:
EAN 4007220**799215**
BA 6/305 CO-COOL 40

How to order:
BA = Abrasive belt
6 = Width T [mm]
305 = Length L [mm]
CO = Ceramic oxide CO
COOL = Bond type
40 = Grit size
Please state required grit size.

Short belts
Ceramic oxide CO-COOL type



Order No.	Grit size				Acc. to ISO standards	Width x length T x L [mm]		g
	40	60	80	120				
	EAN 4007220							
BA 6/305 CO-COOL	799215	799222	799239	799246	-	6 x 305	100	200
BA 9/305 CO-COOL	799352	799369	799376	799383	-	9 x 305	100	300
BA 12/305 CO-COOL	799444	799451	799468	799475	-	12 x 305	100	450
BA 10/330 CO-COOL	799390	799406	799413	799420	2976	10 x 330	100	800
BA 12/330 CO-COOL	799482	799499	799505	799536	-	12 x 330	100	800
BA 13/457 CO-COOL	799628	799635	799642	799659	2976	13 x 457	100	600
BA 16/480 CO-COOL	799666	799673	799680	799697	-	16 x 480	50	600
BA 20/480 CO-COOL	799741	799758	799772	799789	2976	20 x 480	20	300
BA 25/480 CO-COOL	799833	799840	799857	799864	2976	25 x 480	20	380
BA 6/520 CO-COOL	799260	799277	799284	799307	2976	6 x 520	100	500
BA 12/520 CO-COOL	799543	799550	799567	799574	-	12 x 520	100	1.000
BA 16/520 CO-COOL	799703	799710	799727	799734	-	16 x 520	50	350
BA 20/520 CO-COOL	799796	799802	799819	799826	2976	20 x 520	20	200
BA 30/533 CO-COOL	799871	799888	799895	799901	-	30 x 533	20	350
BA 6/610 CO-COOL	799314	799321	799338	799345	2976	6 x 610	100	300
BA 12/610 CO-COOL	799581	799598	799604	799611	-	12 x 610	100	600
BA 30/610 CO-COOL	799918	799925	799932	799949	-	30 x 610	10	290



Short belts
Non-woven material

Suitable for producing matt and satin-finished surfaces on steel, stainless steels and non-ferrous metals.

Abrasive: Aluminium oxide A

Available grit sizes:
100/Coarse = Colour: Yellowish-brown
180/Medium = Colour: Red-brown
240/Fine = Colour: Blue

Recommendation for use:
Recommended cutting speed 10-20 m/s.

Ordering example:
EAN 4007220**586631**
VB 35/450 A 100 coarse

How to order:
VB = Non-woven fabric belt
35 = Width T [mm]
450 = Length L [mm]
A = Aluminium oxide A
100 = Grit size
Please state required grit size.

Order No.	Grit size			Acc. to ISO standards	Width x length T x L [mm]		
	coarse 100	medium 180	fine 240				
	EAN 4007220						
VB 6/305 A	667552	667569	667545	-	6 x 305	10	55
VB 9/305 A	667668	667675	667620	-	9 x 305	10	70
VB 12/305 A	667637	667644	667651	-	12 x 305	10	100
VB 35/450 A	586631	586648	586655	-	35 x 450	10	360
VB 50/450 A	586662	586679	586686	2976	50 x 450	10	380
VB 6/520 A	586518	586525	586532	-	6 x 520	10	60
VB 12/520 A	586549	586556	586563	-	12 x 520	10	110
VB 16/520 A	586570	586587	586594	-	16 x 520	10	140
VB 20/520 A	586600	586617	586624	2976	20 x 520	5	90
VB 30/533 A	667699	667705	667682	2976	30 x 533	5	190
VB 30/610 A	776520	776537	776551	-	30 x 610	5	190

Tool Sets
Tool Sets with Drives

Belt grinder set

Electric belt grinder set with stepless speed range regulation for general surface work from coarse to very fine processing.

This allows optimised speed range regulation for the use of abrasive belts with high speed ranges or of non-woven belts with low speed ranges.

Ideal for all belt grinding work, in particular for construction work. The belt speeds can be regulated electronically and steplessly within the speed range 6,5 to 16 m/s.

Please refer to catalogue 209 for detailed information and order data regarding tool drives.

Contents:
- 1 electric belt grinder UBS 5/100 SI 925 with stepless speed regulation, 500 watts power output .
- 2 abrasive belts each: 6 and 12 mm width, grit 40, 60, 80, 120 and 180.
- 2 non-woven belts each: coarse, medium and fine.

Recommendation for use:
Use higher RPM levels (settings 4-6) with coated abrasive belts
and lower RPM (settings 1-4); with non-woven cloth-backed belts.

Safety note:
Abrasive belts:
max. peripheral speed 32 m/s.
Non-woven belts:
max. peripheral speed 25 m/s

Order No.	EAN 4007220		
SET BA 6-12/520 UBS 5/100 230 V	344125	1	6.100

PFERD provides a comprehensive range of long belts.

They differ in:
- Dimensions,
- grit sizes and
- abrasives used.

The PFERD range is aligned with the standard belt grinders available on the market.

PFERD long belts are designated "Abrasive belts" according to ISO 2976.

Advantages

- High abrasive performance.
- High tensile strength.
- Excellent grit adhesion.
- Long tool life.

Application examples

- Fine-grinding of larger surfaces in multiple steps.
- Surface texturing.
- Creation of uniform visual effects on large surfaces.

Recommendations for use

The use of the appropriate grinding oil on the different materials can substantially increase the tool life and the abrasive performance of tools made from coated abrasives. For detailed information and order data regarding grinding oils, please refer to page 110.

Safety note

Observe the VDS (Verband deutscher Schleifmittelwerke: Association of German Abrasive Manufacturers) safety guidelines "Safety guidelines for the correct use of abrasive belts". You can find this information on our homepage, www.pferd.com.

Safety recommendations

= Wear eye protection!

= Wear gloves!

= Wear hearing protection!

= Wear a respirator!

= Read the instructions!

= Not permitted for wet grinding!

Long belts are suitable for coarse and fine grinding on metals and wood. They can be used on all commercial and special belt grinders in industry and crafts.

The long belts accord with ISO 2976.

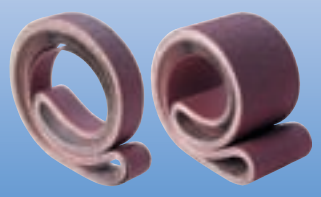
Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**621059**
BA 50/1000 A 60

How to order:

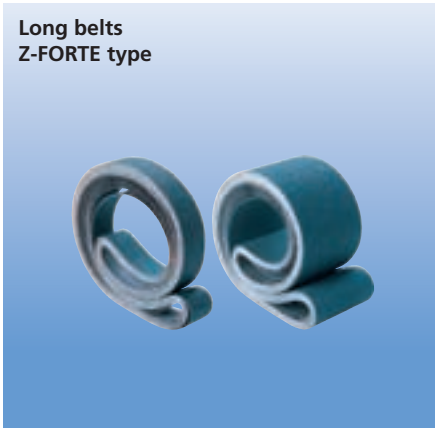
BA	= Abrasive belt
50	= Width T [mm]
1000	= Length L [mm]
A	= Aluminium oxide
40	= Grit size Please state required grit size.

Long belts
Aluminium oxide A type



Order No.	Grit size					Width x length T x L [mm]		
	36	40	60	80	120			
	EAN 4007220							
BA 50/1000 A	-	-	621059	621066	621073	50 x 1.000	10	580
BA 100/1000 A	-	585917	585924	585931	585948	100 x 1.000	10	1.000
BA 50/2000 A	-	585771	585788	585795	585801	50 x 2.000	10	1.100
BA 75/2000 A	600481	585832	585849	585856	585863	75 x 2.000	10	2.000
BA 150/2000 A	600597	585955	585962	585979	-	150 x 2.000	10	4.000
BA 75/2500 A	620373	585870	585887	585894	585900	75 x 2.500	10	2.800

Long belts
Z-FORTE type



Designed for very cool grinding and long tool life.

Particularly suitable for work on thin-walled stainless steel components (INOX) and steels or nickel-based alloys which do not conduct heat well.

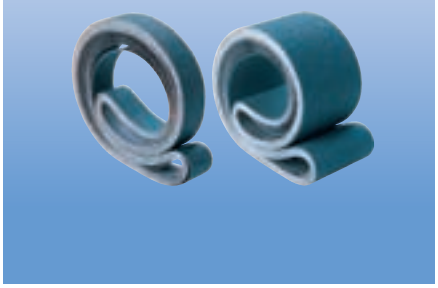
Abrasive: Zirconia aluminia Z-FORTE

Ordering example:
EAN 4007220**620243**
BA 75/2000 Z 40 FORTE

How to order:
BA = Abrasive belt
75 = Width T [mm]
2000 = Length L [mm]
Z = Zirconia alumina Z
40 = Grit size
Please state required grit size.
FORTE = Bond type

Order No.	Grit size					Width x length T x L [mm]		
	36	40	50	60	80			
	EAN 4007220							
BA 50/1600 Z ... FORTE	621110	-	621127	621134	621158	50 x 1.600	10	1.200
BA 75/2000 Z ... FORTE	620175	620243	620281	620311	620335	75 x 2.000	10	2.200
BA 75/2500 Z ... FORTE	620458	620502	620533	-	-	75 x 2.500	10	3.100

Long belts
Zirconia alumina Z type



For heavy-duty use and maximum stock removal.

For work on steel, stainless steel (INOX), non-ferrous metals and cast iron with flake graphite.

The long belts accord with ISO 2976.

Abrasive: Zirconia alumina Z

Ordering example:
EAN 4007220**586457**
BA 100/1000 Z 40

How to order:
BA = Abrasive belt
100 = Width T [mm]
1000 = Length L [mm]
Z = Zirconia alumina Z
24 = Grit size
Please state required grit size.

Order No.	Grit size						Width x length T x L [mm]		
	24	36	40	60	80	120			
	EAN 4007220								
BA 100/1000 Z	-	-	586457	586464	586471	621042	100 x 1.000	10	1.500
BA 50/2000 Z	621219	621233	586327	586334	586341	619353	50 x 2.000	10	1.500
BA 75/2000 Z	600511	586358	586365	586372	586389	586396	75 x 2.000	10	2.500
BA 150/2000 Z	-	600641	586488	586495	586501	600672	150 x 2.000	10	5.000
BA 75/2250 Z	-	-	613191	613214	-	-	75 x 2.250	10	2.200
BA 75/2500 Z	-	586402	586419	586426	586433	-	75 x 2.500	10	2.800
BA 150/2500 Z	-	621141	-	-	-	-	150 x 2.500	10	6.600

For use on metals or wood. Designed for ultra heavy-duty applications, resists oil and petroleum.
PFERD offers two types of cloth-backed sheets. The sheets can be torn down to the required size. The abrasive sheets with cloth backing comply to ISO 21948.

Abrasive sheets brown:
Suitable for general use and heavy-duty use with alloy and non-alloy steels and non-ferrous metals.

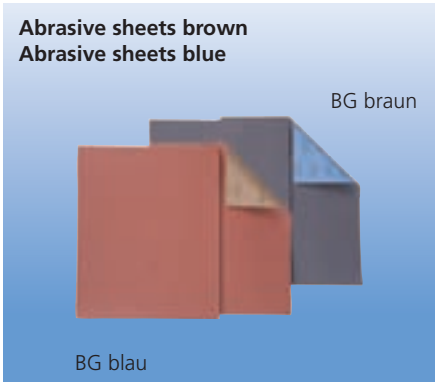
Advantages:
- Very flexible backing.
- Excellent grit adhesion.
- High abrasive performance.
- Oil and kerosene resistant.

Abrasive sheets blue:
Lower-price alternative for normal loads when working on painted wooden and metal surfaces.

Advantages:
- Strong backing.
- Good grit adhesion.
- Good abrasive performance.

Ordering note for BG blue:
The grit sizes A 40, 60 and 80 are supplied in packaging units of 50 pcs.

Abrasive sheets brown
Abrasive sheets blue



Order No.	Grit size								Width x length T x L [mm]		g
	40	60	80	100	120	150	180	220			
	EAN 4007220										
BG braun* 230x280 A	587393	587409	587416	587423	587430	587447	587454	587461	230 x 280	50	1.950
BG blau** 230x280 A	587270	587287	587294	587300	587317	587324	587331	587348	230 x 280	50	2.650

Order No.	Grit size						Width x length T x L [mm]		g
	240	280	320	400	444	999			
	EAN 4007220								
BG braun* 230x280 A	587478	587485	587492	587515	587522	587539	230 x 280	50	1.300
BG blau** 230x280 A	587355	-	-	-	-	-	230 x 280	100	2.400

***** braun = brown ******blau = blue

PFERD offers two types of abrasive sheets, paper-backed. The abrasive sheets with cloth backing comply to ISO 21948.

Abrasive sheets, waterproof, SiC type:
The SiC abrasive especially for use on paint and glass. Particularly suitable for all wet grinding work on conventional paint constructions.
Advantages:
- Very flexible and light paper.
- Excellent grit adhesion.
- Large grit size spectrum.
- Can be used for wet and dry grinding.

Abrasive sheets, aluminium oxide A type:
Low-price alternative for normal workloads when working on painted wooden and metal surfaces.

Advantages:
- Strong paper.
- Good abrasive performance.

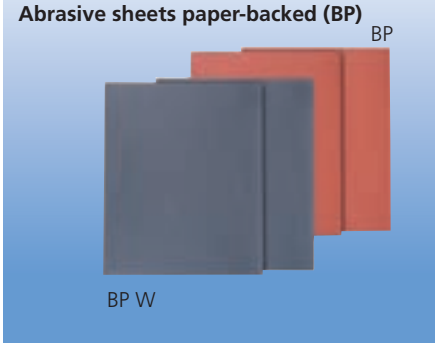
Ordering note for BP:
The grit sizes 40, 60 and 80 are supplied in packaging units of 50 pcs.

Ordering example:
EAN 4007220**587546**
BP W 230 x 280 C 100

How to order:

BP	= Paper-backed abrasive sheet
W	= Water resistant
230	= Width T [mm]
280	= Length L [mm]
C	= Silicon carbide SiC
100	= Grit size

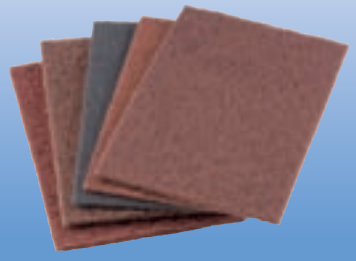
Abrasive sheets, waterproof (BP W)
Abrasive sheets paper-backed (BP)



Order No.	Grit size								Width x length T x L [mm]		g
	40	60	80	100	120	150	180	220			
	EAN 4007220										
BP W 230x280 C	-	-	-	587546	588222	588239	588246	588253	230 x 280	50	1.200
BP 230x280 A	622520	622544	622551	622568	622575	622582	622476	622483	230 x 280	50	2.100

Order No.	Grit size										Width x length T x L [mm]		g
	240	280	320	360	400	500	600	800	1000	1200			
	EAN 4007220												
BP W 230x280 C	588260	588277	588284	588291	588307	588314	588321	588338	588345	588352	230 x 280	50	1.200
BP 230x280 A	622490	622506	-	-	622513	-	-	-	-	-	230 x 280	100	2.100

POLIVLIES® hand pads



POLIVLIES® hand pads are used for manual light grinding, deburring and cleaning work on metal, plastic (GRP), stainless steel (INOX), aluminium, paint and fillers.

Due to the flexibility of POLIVLIES® hand pads, contours and hard-to-reach places can be worked on with ease.

Abrasive:
A = Aluminium oxide
C = Silicon carbide

Recommendation for use:
PVSK can be used in dry or wet grinding.

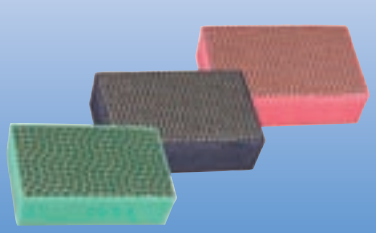
Ordering example:
EAN 4007220**294642**
PVSK 150 A 280 Fine

How to order:

PVSK	= POLIVLIES® hand pads
150	= Width T [mm]
A	= Aluminium oxide A
280 fine	= Grit size
	Please state required grit size.

Order No.	Grit size					Width x length T x L [mm]		
	80 very coarse	100 coarse	180 medium	280 fine	400 very fine			g
	EAN 4007220							
PVSK 150 A	294611	294628	294635	294642	-	154 x 224	10	650
PVSK 150 C	-	-	-	-	294659	154 x 224	10	250

Hand pads
Diamond type



Perfect for grinding work on wear protection coatings as well as hard facings made of tungsten carbide, chromium carbide, titanium carbide etc. in particular for working ceramic coatings for engine and turbine construction. Also highly suitable for work on extremely abrasive materials such as glass and carbon fibre reinforced plastics (GRP/CRP).

Abrasive: Diamond

D 251 (green) = P 60
D 126 (black) = P 120
D 76 (red) = P 200
P = Grit size according to ISO 6344.

Recommendation for use:
- The hand pads can be used for dry and wet grinding.
- Work at appropriate grinding pressures.

Ordering note:
The grit sizes are stated in µm.
For further information on diamond abrasive tools, please refer to catalogue 205.

Ordering example:
EAN 4007220**804568**
HP 5590 DIA 251

How to order:

HP	= Hand pads
55	= Width B [mm]
90	= Length L [mm]
DIA	= Diamond D
251	= Grit size in µm
	Please state required grit size.

Order No.	Grit size			Width x length B x L [mm]		
	251	126	76			g
	EAN 4007220					
HP 5590 DIA	804568	804575	804582	55 x 90	1	50

Economy rolls are suitable for hand grinding of all types of metals and materials.

SBR 25, SBR 40 and SBR 50 correspond to shape B, ISO 3366.
SBR 100 corresponds to shape A, ISO 3366.

The PFERD range of economy rolls consists of different
- belt widths,
- grit sizes and
- backing material.

Explanation of the code system:
T = Roll width [mm]
L = Roll length [mm]

Advantages

- High flexibility.
- High tensile strength.
- Excellent grit adhesion.

Ordering example:
EAN 4007220**587553**
SBR 25 A 60

How to order:

SBR	= Economy roll
25	= Width T [mm]
A	= Aluminium oxide A
60	= Grit size
	Please state required grit size.

Application examples

- Manual grinding of hard-to-reach places.
- Grinding irregular contours, concave or convex curvatures on pipes.
- Fine finishing of turned parts.
- Work in an engineering workshop.

Recommendations for use

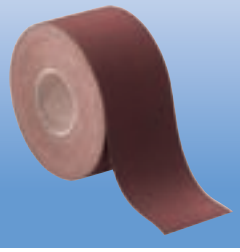
- The required roll lengths are cut off as required.
- Appropriate economy roll holders are available for clean and well-ordered storage.

Economy rolls (cloth-backed)
Aluminium oxide A type

Order No.	Grit size							Width x length T x L [mm]	Cent. hole dia. [mm]		g
	40	50	60	80	100	120	150				
	EAN 4007220										
SBR 25 A	-	-	587553	587560	587577	587584	587591	25 x 50.000	26	1	890
SBR 38 A	602010	602027	602034	602041	602058	602065	602072	38 x 25.000	26	1	840
SBR 40 A	587645	-	587652	587669	587676	587683	587690	40 x 50.000	26	1	1.600
SBR 50 A	587744	-	587751	587768	587775	587782	587799	50 x 50.000	26	1	1.800
SBR 100 A	587843	-	587850	588864	587874	587881	587973	100 x 50.000	75	1	3.900

Order No.	Grit size							Width x length T x L [mm]	Cent. hole dia. [mm]		g
	180	220	240	320	400	600	800				
	EAN 4007220										
SBR 25 A	587607	-	587614	587621	587638	607237	607244	25 x 50.000	26	1	890
SBR 38 A	602089	602096	602102	602119	602126	-	-	38 x 25.000	26	1	840
SBR 40 A	587706	622612	587713	587720	587737	-	-	40 x 50.000	26	1	1.600
SBR 50 A	587805	621981	587812	587829	587836	607251	-	50 x 50.000	26	1	1.800
SBR 100 A	587980	-	587997	588000	588017	-	-	100 x 50.000	75	1	3.900

Economy rolls (paper-backed)
Aluminium oxide A type



Suitable for manual grinding on wood, metals and paint.

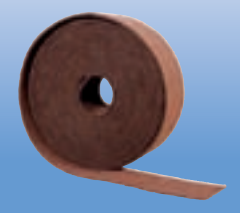
Ordering example:
EAN 4007220**667781**
SBR-P 115 A 60

How to order:
SBR = Economy roll
P = Paper
95 = Width T [mm]
A = Aluminium oxide A
60 = Grit size
Please state required grit size.

Order No.	Grit size						Width x length T x L [mm]	Cent. hole dia. [mm]		g
	40	60	80	100	120	150				
	EAN 4007220									
SBR-P 115 A	667774	667781	622858	622865	667798	667804	115 x 25.000	75	1	1.600

Economy Rolls (Non-Woven Backed)

Economy rolls (non-woven backed)
Aluminium oxide A type



Suitable for work on metals, plastics, paints and fillers.
Water, oil and kerosene resistant. Recommended for light cleaning and deburring work.

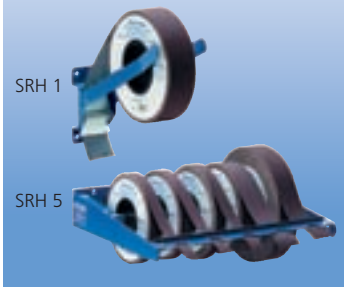
Ordering example:
EAN 4007220**622711**
VBR 100 A 100

How to order:
VBR = Economy roll (non-woven backed)
100 = Width T [mm]
A = Aluminium oxide A
100 = Grit size
Please state required grit size.

Order No.	Grit size			Width x length T x L [mm]		g
	100	180	280			
	EAN 4007220					
VBR 100 A	622711	622728	622735	100 x 10.000	1	680

Arbors

Economy roll holders
SRH 1 and SRH 5



Two different holders are available for storage and for tearing off the belts to the required length:

Economy roll holder SRH 1 (empty)
For economy rolls 25, 38, 40 or 50 mm in width.
Economy roll holder SRH 5 (empty)
For economy rolls 25, 38, 40 or 50 mm in width. Various combinations of roll holder are possible e.g. 5 x 50 mm or 5 x 40 mm.

Both holders are prepared for wall mounting.

Order No.	EAN 4007220	No. of rolls	Suitable for roll widths	Suitable for roll dia. [mm]		g
SRH 1	297551	1	25/38/40/50	380	1	690
SRH 5	297568	see above	25/38/40/50	260	1	700

Velcro-backed abrasive discs are suitable for fine grinding of larger surfaces using eccentric orbital sanders.
The PFERD range of self-adhesive grinding discs is aligned to the standard power sources available on the market.

Advantages

- High flexibility.
- Quick tool change.

The Velcro-backed abrasive discs with suction holes are designed according to ISO 21951 shape A.

Ø 115 8L: 8 suction holes ø 10 mm, pitch circle 65 mm
ISO 21951 – Nominal size 4

Ø 125 8L: 8 suction holes ø 10 mm, pitch circle 65 mm
ISO 21951 – Nominal size 6

Ø 150 8L: 8 suction holes ø 10 mm, pitch circle 65 mm
ISO 21951 – Nominal size 9

Ø 150 6L: 6 suction holes ø 10 mm, pitch circle 80 mm
ISO 21951 – Nominal size 10

Velcro-backed abrasive discs in aluminium oxide A type are suitable for general use on metal, wood and paint.

Advantages:
- High abrasive performance.
- Low clogging giving maximum tool life.

Application examples:
- Paint removal.
- Fine grinding in preparation for painting.
- Fine grinding of wood.

Ordering example:
EAN 4007220**599211**
KSS 125 8 L A 40

How to order:

KSS	= Velcro-backed abrasive disc
125	= Dia. D_1 [mm]
8 L	= 8 holes (O L = without hole, 6 L = 6 holes)
A	= Aluminium oxide A
40	= Grit size Please state required grit size.

Velcro-backed abrasive discs Aluminium oxide A

Order No.	Grit size										D_1 [mm]		
	40	60	80	100	120	150	180	240	320	400			g
	EAN 4007220												
KSS 115 O L A	599167	599174	599181	599198	-	-	-	-	-	-	115	25	230
KSS 125 O L A	599273	599297	599303	599310	599426	599327	-	-	-	-	125	25	245
KSS 150 O L A	599341	599358	599365	599372	599389	599396	599402	599419	-	-	150	25	310
KSS 115 8 L A	599211	599228	599235	599242	599259	599266	-	-	-	-	115	25	210
KSS 125 8 L A	588024	588031	588048	588055	588062	588079	588086	588093	588109	588116	125	25	220
KSS 150 8 L A	599105	599112	599129	599136	599143	599150	-	-	-	-	150	25	340
KSS 150 6 L A	588123	588130	588147	588154	588161	588178	588185	588192	588208	588215	150	25	290

Perfect for grinding work on wear protection coatings as well as hard facings made of tungsten carbide, chromium carbide, titanium carbide etc. in particular when working on ceramic coatings for engine and turbine construction. Also suitable for work on extremely abrasive materials such as glass and carbon fibre reinforced plastics (GRP/CRP).

Abrasive: Diamond

D 251 (green)	= P 60
D 126 (black)	= P 120
D 76 (red)	= P 200

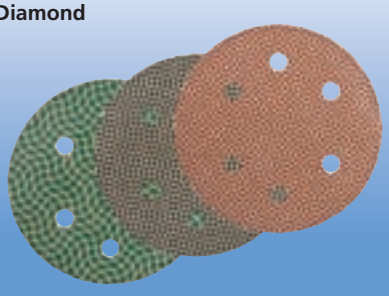
P = Grit size according to ISO 6344.

Ordering information:
The grit size are given in µm.
Please refer to catalogue 205 for further information on diamond grinding tools.

Application examples:
- Removal of ceramic coatings in turbine construction.
- Grinding of rotor blades made of GRP laminates for wind power plants.
- Fine grinding of GRP components before painting.

Recommendation for use:
- The velcro-backed abrasive discs can be used for wet and dry grinding.

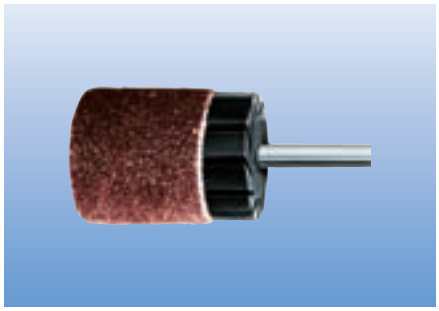
Velcro-backed abrasive discs Diamond



Order No.	Grit size			D_1 [mm]		
	251	126	76			g
	EAN 4007220					
KSS 115 8 L DIA	804476	804483	804490	115	1	25
KSS 125 8 L DIA	804506	804513	804520	125	1	30
KSS 150 6 L DIA	804537	804544	804551	150	1	80

Abrasive Spiral Bands

General Information



Safety recommendations

= Wear eye protection!

= Wear gloves!

= Wear hearing protection!

= Read the instructions!

Cutting speed abrasive spiral bands

In this diagram, the cutting speeds are represented using blue diagonal lines. The vertical line representing the tool dia. meets the given cutting speed (diagonals). From its point of intersection proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] of the abrasive spiral bands and the machine.

Example:
KSB 4530 A 60
Cutting speed: 20-30 m/s
Speed range: 8.500-12.500 RPM

PFERD offers different types in terms of shapes, dimensions, abrasives, grit sizes and packaging units. Abrasive spiral bands are designated "Cylindrical Abrasive Sleeves" according to ISO 2421.

PFERD offers matching cylindrical and conical rubber drum holders. Rubber drum holders are re-usable holders for abrasive spiral bands and are designated as "Holding Fixtures for Cylindrical Abrasive Spiral Bands" according to ISO 15637-1.

A closely toleranced fit ensures that the sleeve will remain firmly secured to the drum holder during grinding.

Advantages

- PFERD has an extentive range of abrasive spiral bands of various grit types and holders suitable for a wide range of applications.
- Drum holders are fully reusable.
- Slots allow the drum to expand during grinding, thereby tensioning the abrasive sleeve.
- A special manufacturing method ensures an outstanding tool life, even in heavy-duty use.
- Particularly high stock removal and very aggressive abrasive action.

Application examples

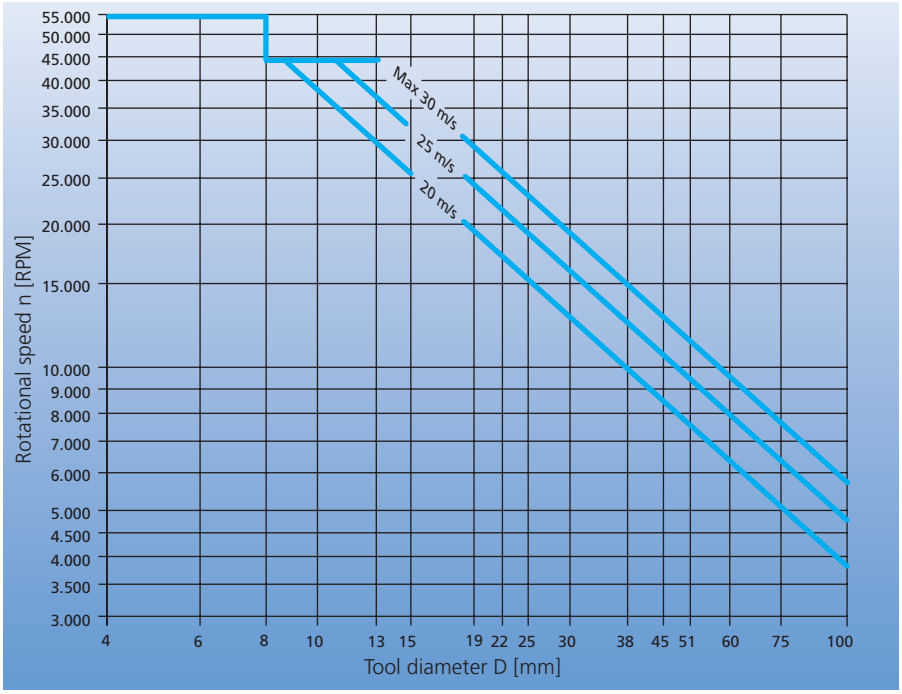
- Weld removal on steel constructions.
- Fine grinding work in tank and process equipment construction.
- Rework in assembly and repair projects.
- Working on edges and contours in aircraft engine construction.

Recommendations for use

- The abrasive spiral bands can be mounted and removed by turning them slightly to the right and pulling at the same time.
- Abrasive spiral bands can be changed more easily, if the rubber drum holder is clamped into the tool drive.
- The abrasive spiral bands can only be guaranteed to fit securely if minimum speed is maintained.
- Abrasive spiral bands perform best at a cutting speed of 20-30 m/s.
- By using the appropriate grinding oil for the different materials, the tool life and the abrasive performance of the abrasive spiral bands can be substantially increased. For detailed information and order data on grinding oils, please refer to page 110.

Safety notes

- The maximum permissible peripheral speed is 30 m/s.
- For safety reasons, it is imperative to remain within the stated RPM limit.
- Do not let the abrasive spiral bands project over the rubber holder.
- Observe the VDS (Verband deutscher Schleifmittelwerke: Association of German Abrasive Manufacturers) safety guidelines "Safety guidelines for the correct use of abrasive belts". You can find this information on our homepage, www.pferd.com.



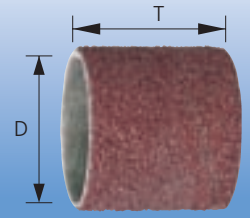
The aluminium oxide A type is suitable for general applications from fine to finest grinding on metals and other materials.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**149461**
KSB 4530 A 40

How to order:
KSB = Abrasive spiral bands, small pack
4530 = Dia. D x width T [mm]
A = Aluminium oxide A
40 = Grit size
Please state required grit size.

Abrasive spiral bands A - small pack



Order No.	Grit size						D x T [mm]	Recom. speed [RPM]		g
	40	50	60	80	150	240				
	EAN 4007220									
KSB 0410 A	-	-	-	-	148860	-	4 x 10	30.000 - 55.000	25	25
KSB 0610 A	-	-	-	-	148884	-	6 x 10	30.000 - 55.000	25	25
KSB 0810 A	-	-	-	-	148907	-	8 x 10	30.000 - 55.000	25	25
KSB 1010 A	-	-	-	148921	148938	-	10 x 10	30.000 - 44.000	25	25
KSB 1020 A	-	-	-	148952	148969	148976	10 x 20	30.000 - 44.000	25	25
KSB 1310 A	-	-	-	148983	148990	-	13 x 10	30.000 - 44.000	25	25
KSB 1325 A	-	-	-	149010	149027	-	13 x 25	30.000 - 44.000	25	50
KSB 1510 A	-	-	149041	149058	149065	-	15 x 10	26.000 - 36.000	25	25
KSB 1530 A	-	149089	149096	149102	149119	149126	15 x 30	26.000 - 36.000	25	50
KSB 1925 A	-	-	149133	149140	149157	149164	19 x 25	20.000 - 30.000	25	50
KSB 2220 A	-	149171	149188	149195	149201	-	22 x 20	18.000 - 26.000	25	100
KSB 2525 A	-	-	149225	149232	149249	-	25 x 25	16.000 - 22.900	25	100
KSB 3020 A	149263	-	149270	149287	149294	-	30 x 20	13.000 - 19.100	25	100
KSB 3030 A	149324	149317	149331	149348	149355	-	30 x 30	13.000 - 19.100	25	125
KSB 3825 A	149379	-	149386	149393	149409	-	38 x 25	10.000 - 15.900	25	125
KSB 4530 A	149461	149454	149478	149485	149492	-	45 x 30	8.500 - 12.700	10	100
KSB 5125 A	149515	-	149522	149539	149546	-	51 x 25	7.500 - 11.200	10	100
KSB 6030 A	149577	149560	149584	149591	149607	-	60 x 30	6.500 - 9.500	10	120
KSB 7530 A	149614	-	149621	149638	149645	-	75 x 30	5.000 - 7.600	10	140

Perfect for grinding work on anti-wear coatings and for hard facings made of tungsten carbide, chromium carbide, titanium carbide etc. in particular when working on ceramic coatings for engine and turbine construction. Also ideally suitable for working on extremely abrasive materials such as glass and fibre reinforced plastics.

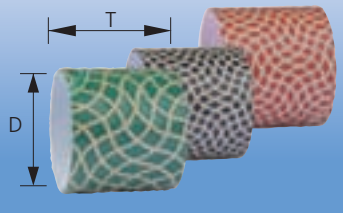
Application examples:
- Removal of ceramic coatings during turbine maintenance work.
- Grinding and trimming of connecting parts on components made of GRP laminates.

Abrasive: Diamond
D 251 (green) = P 60
D 126 (black) = P 120
D 76 (red) = P 200
P = Grit size according to ISO 6344.

Recommendation for use:
- The abrasive spiral bands should always be used with a coolant (water).
- Work at substantially reduced grinding pressures.

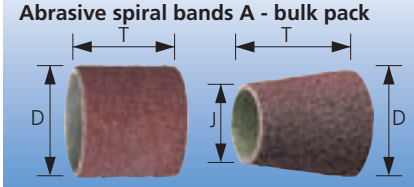
Ordering note:
The grit sizes are given in µm.
Please refer to catalogue 205 for detailed information.

Diamond abrasive spiral bands small pack



Order No.	Grit size			D x T [mm]	Recom. speed [RPM]		g
	251	126	76				
	EAN 4007220						
KSB 1530 DIA	804346	804353	804360	15 x 30	12.500	1	23
KSB 2220 DIA	804377	804384	804391	22 x 20	9.000	1	23
KSB 3030 DIA	804407	804421	804438	30 x 30	6.500	1	26
KSB 4530 DIA	804445	804452	804469	45 x 30	4.500	1	29

Abrasive spiral bands A - bulk pack



The aluminium oxide A type is suitable for general purpose; from fine to finest grinding on metals and other materials.
Available in cylindrical and conical shapes.

Abrasive: Aluminium oxide A

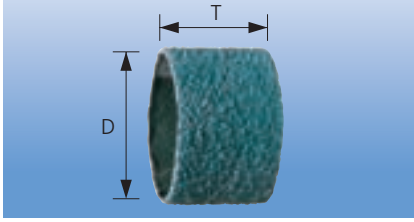
Ordering example:
EAN 4007220**148372**
GSB 4530 A 40

How to order:

GSB	= Abrasive spiral bands, bulk pack
4530	= Dia. D x width T [mm]
A	= Aluminium oxide A
40	= Grit size
	Please state required grit size.

Order No.	Grit size						D x J x T [mm]	Recom. speed [RPM]		g
	40	50	60	80	150	240				
	EAN 4007220									
Cylindrical type										
GSB 0410 A	-	-	-	-	147610	-	4 x 10	30.000 - 55.000	100	36
GSB 0610 A	-	-	-	-	147634	-	6 x 10	30.000 - 55.000	100	41
GSB 0810 A	-	-	-	-	147658	-	8 x 10	30.000 - 55.000	100	41
GSB 1010 A	-	-	-	147672	147689	-	10 x 10	30.000 - 44.000	100	80
GSB 1020 A	-	-	-	147702	147719	147726	10 x 20	30.000 - 44.000	100	164
GSB 1310 A	-	-	-	147733	147740	-	13 x 10	30.000 - 44.000	100	90
GSB 1325 A	-	-	-	147764	147771	-	13 x 25	30.000 - 44.000	100	209
GSB 1510 A	-	-	147795	147801	147818	-	15 x 10	26.000 - 36.000	100	100
GSB 1530 A	-	147832	147849	147856	147863	147870	15 x 30	26.000 - 36.000	100	261
GSB 1925 A	-	-	147931	147948	147955	-	19 x 25	20.000 - 30.000	100	276
GSB 2220 A	-	147979	147986	147993	148006	148013	22 x 20	18.000 - 26.000	100	291
GSB 2525 A	-	-	148075	148082	148099	-	25 x 25	16.000 - 22.900	100	446
GSB 3020 A	148112	-	148129	148136	148143	-	30 x 20	13.000 - 19.100	100	446
GSB 3030 A	148174	148167	148181	148198	148204	148211	30 x 30	13.000 - 19.100	100	546
GSB 3825 A	148280	-	148297	148303	148310	-	38 x 25	10.000 - 15.900	100	700
GSB 4530 A	148372	148365	148389	148396	148402	148419	45 x 30	8.500 - 12.700	100	910
GSB 5125 A	148488	-	148495	148501	148518	-	51 x 25	7.500 - 11.200	100	860
GSB 6030 A	148549	148532	148556	148563	148570	-	60 x 30	6.500 - 9.500	100	1.290
GSB 7530 A	148648	-	148655	148662	148679	-	75 x 30	5.000 - 7.600	100	1.520
GSB 10040 A	148686	-	148693	148709	148716	-	100 x 40	4.000 - 5.700	50	1.490
Conical type										
GSB 201463 A	148723	-	148730	148747	148754	148761	20 x 14 x 63	19.000 - 26.000	100	511
GSB 292230 A	148778	-	148785	148792	148808	-	29 x 22 x 30	13.000 - 19.100	100	431
GSB 362260 A	148822	-	148839	148846	148853	-	36 x 22 x 60	10.000 - 15.900	100	946

Abrasive spiral bands Z - bulk pack



The zirconia alumina type is intended for maximum stock removal.

The exceptionally aggressive cutting properties of zirconia aluminia effective at increased grinding pressures and ensure excellent stock removal.

Abrasive: Zirconia alumina Z

Ordering example:
EAN 4007220**805664**
GSB 4530 Z 40

How to order:

KSB	= Abrasive spiral bands, small pack
4530	= Dia. D x width T [mm]
Z	= Zirconia alumina Z
40	= Grit size
	Please state required grit size.

Order No.	Grit size				D x T [mm]	Recom. speed [RPM]		g
	40	50	60	80				
	EAN 4007220							
GSB 1325 Z	-	804827	804872	804889	13 x 25	30.000 - 44.000	100	220
GSB 1925 Z	804896	804902	804940	804957	19 x 25	20.000 - 30.000	100	290
GSB 2525 Z	805022	805077	805084	805091	25 x 25	16.000 - 22.900	100	480
GSB 3030 Z	805145	805152	805176	805183	30 x 30	13.000 - 19.100	100	570
GSB 3825 Z	805190	-	805206	-	38 x 25	10.000 - 15.900	100	750
GSB 4530 Z	805664	805671	805725	805732	45 x 30	8.500 - 12.700	100	950
GSB 5125 Z	803943	-	803950	803967	51 x 25	7.500 - 11.200	100	900

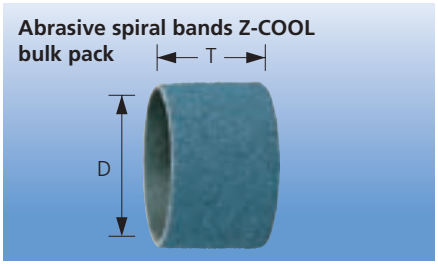
The Z-COOL type is characterised by its particularly cool grinding qualities. It does not clog up and is mainly used for work on stainless steel (INOX).

Achieves good abrasive performances and at the same time long tool life.

Abrasive: Zirconia alumina Z-COOL

Ordering example:
EAN 4007220**148426**
GSB 4530 Z-COOL 36

How to order:
GSB = Abrasive spiral bands, bulk pack
4530 = Dia. D x width T [mm]
Z = Zirconia alumina Z
COOL = Bond type
36 = Grit size
Please state required grit size.
INOX = Type



Order No.	Grit size				D x T [mm]	Recom. speed [RPM]		g
	36	50	80	150				
	EAN 4007220							
GSB 1530 Z-COOL	-	147887	147894	147924	15 x 30	26.000 - 36.000	100	261
GSB 2220 Z-COOL	-	148020	148037	148068	22 x 20	18.000 - 26.000	100	446
GSB 3030 Z-COOL	148228	148235	148242	148273	30 x 30	13.000 - 19.100	100	546
GSB 4530 Z-COOL	148426	148433	148440	148471	45 x 30	8.500 - 12.700	100	910
GSB 6030 Z-COOL	148587	148594	148600	148631	60 x 30	6.500 - 9.500	100	1.290

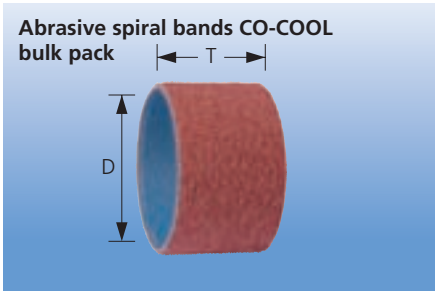
For highly-abrasive grinding with maximum stock removal on hard, poor heat conducting materials which do not conduct heat well.

Grinding additives in the coating clearly improve stock removal, prevent clogging and allow a cooler grind.

Abrasive: Ceramic oxide CO-COOL

Ordering example:
EAN 4007220**772362**
GSB 4530 CO-COOL 60

How to order:
GSB = Abrasive spiral bands, bulk pack
4530 = Dia. D x width T [mm]
CO = Ceramic oxide CO
COOL = Bond type
60 = Grit size
Please state required grit size.

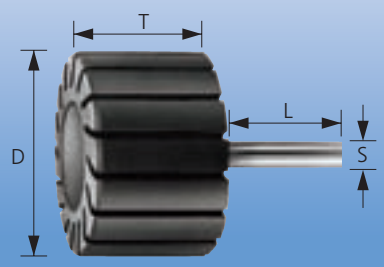


Order No.	Grit size				D x T [mm]	Recom. speed [RPM]		g
	36	60	80	120				
	EAN 4007220							
GSB 1530 CO-COOL	-	772195	772201	772218	15 x 30	26.000 - 36.000	100	261
GSB 2220 CO-COOL	-	772225	772232	772249	22 x 20	18.000 - 26.000	100	291
GSB 2525 CO-COOL	-	772256	772263	772270	25 x 25	16.000 - 22.900	100	446
GSB 3030 CO-COOL	772287	772294	772317	772331	30 x 30	13.000 - 19.100	100	546
GSB 4530 CO-COOL	772355	772362	772393	772409	45 x 30	8.500 - 12.700	100	910
GSB 6030 CO-COOL	772416	772423	772430	772447	60 x 30	6.500 - 9.500	100	1.290

Abrasive Spiral Bands

Rubber Drum Holders

Rubber drum holders, cylindrical



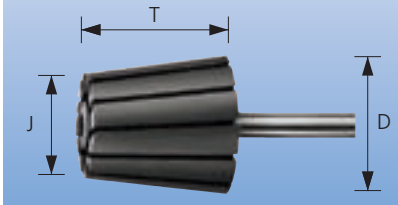
Rubber drum holders marked "H" are the harder type and permit grinding at higher contact pressures. Due to their reduced elasticity they are more suitable for edge grinding.

Rubber drum holders - standard type
= Hardness approx. 65 Shore A

Rubber drum holders - special type "H"
= Hardness approx. 80 Shore A

Recommendation for use:
The minimum speeds stated here are not valid if diamond abrasive sleeves are being used.

Rubber drum holders, conical



Order No.	EAN 4007220	D x J x T [mm]	S x L [mm]	Acc. to ISO standards	Max. speed [RPM]	Minimum speed [RPM]		g
Cylindrical type								
GK 0410/3	146729	4 x 10	3 x 40	-	55.000	30.000	5	44
GK 0410/6	146712	4 x 10	6 x 40	-	55.000	30.000	5	89
GK 0610/3	146743	6 x 10	3 x 40	-	55.000	30.000	5	48
GK 0610/6	146736	6 x 10	6 x 40	-	55.000	30.000	5	93
GK 0810/3	146767	8 x 10	3 x 40	-	55.000	30.000	5	50
GK 0810/6	146750	8 x 10	6 x 40	-	55.000	30.000	5	95
GK 1010/6	146774	10 x 10	6 x 35	15637-1	44.000	30.000	5	50
GK 1020/6	146781	10 x 20	6 x 35	15637-1	44.000	30.000	5	60
GK 1310/6	146798	13 x 10	6 x 35	-	44.000	30.000	5	54
GK 1325/6	146804	13 x 25	6 x 35	-	44.000	30.000	5	80
GK 1510/6	146811	15 x 10	6 x 35	15637-1	36.000	26.000	5	60
GK 1530/6	146828	15 x 30	6 x 35	15637-1	36.000	26.000	5	100
GK 1925/6	146835	19 x 25	6 x 35	-	30.000	20.000	5	104
GK 2220/6	146842	22 x 20	6 x 35	15637-1	26.000	18.000	5	102
GK 2220/6 H	146859	22 x 20	6 x 35	15637-1	26.000	18.000	5	102
GK 2525/6	146866	25 x 25	6 x 35	-	22.900	16.000	5	130
GK 3020/6	146873	30 x 20	6 x 35	15637-1	19.100	13.000	5	138
GK 3030/6	146880	30 x 30	6 x 35	15637-1	19.100	13.000	5	187
GK 3030/6 H	146897	30 x 30	6 x 35	15637-1	19.100	13.000	5	187
GK 3825/6	146903	38 x 25	6 x 35	-	15.900	10.000	5	248
GK 4530/6	146927	45 x 30	6 x 35	15637-1	12.700	8.500	5	445
GK 4530/6 H	146934	45 x 30	6 x 35	15637-1	12.700	8.500	5	445
GK 5125/6	146941	51 x 25	6 x 35	-	11.200	7.500	5	470
GK 6030/6	146958	60 x 30	6 x 35	15637-1	9.500	6.500	5	670
GK 6030/8	146965	60 x 30	8 x 35	15637-1	9.500	6.500	5	770
GK 7530/8	146972	75 x 30	8 x 35	15637-1	7.600	5.000	5	1.025
GK 10040/8	146989	100 x 40	8 x 35	15637-1	5.700	4.000	5	2.250
Conical type								
GK 201463/6	147078	20 x 14 x 63	6 x 37	-	26.000	19.000	5	190
GK 292230/6	147085	29 x 22 x 30	6 x 40	-	19.100	13.000	5	167
GK 362260/6	147092	36 x 22 x 60	6 x 40	-	15.900	10.000	5	370

POLIROLL® and POLICO® tools consist of a spiral-wound coated abrasive. The grit is embedded in a resinoid bond on the strong cloth backing material for maximum grinding effectiveness.

The tool is held securely in place during grinding by a grooved conical arbor.

PFERD offers cylindrical and conical abrasive rolls.

Advantages

- POLIROLL® and POLICO® tools are ideal for grinding in confined areas.
- Fresh grain is exposed in successive layers as the outer coated abrasive wears off.
- Very good stock removal performance.
- Special arbor for easy tool replacement.

Application examples

- Deburring on bores and in hard-to-reach places.
- Fillet weld dressing on metal structures.
- Removal of flash on castings.

Recommendations for use

- Always grind using the tip and not the surface; otherwise the adhesive will be damaged through the produced heat.
- Always apply the cartridge rolls with the adhered side facing the arbor.
- The use of the appropriate grinding oil on the different materials can substantially increase the tool life and the abrasive performance of the POLIROLL® abrasive rolls. For detailed information and order data regarding grinding oils, please refer to page 110.

Safety notes

- Die maximum permissible peripheral speed is 11 m/s.
- For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Safety recommendations

= Wear eye protection!

= Wear gloves!

= Wear hearing protection!

= Wear a respirator!

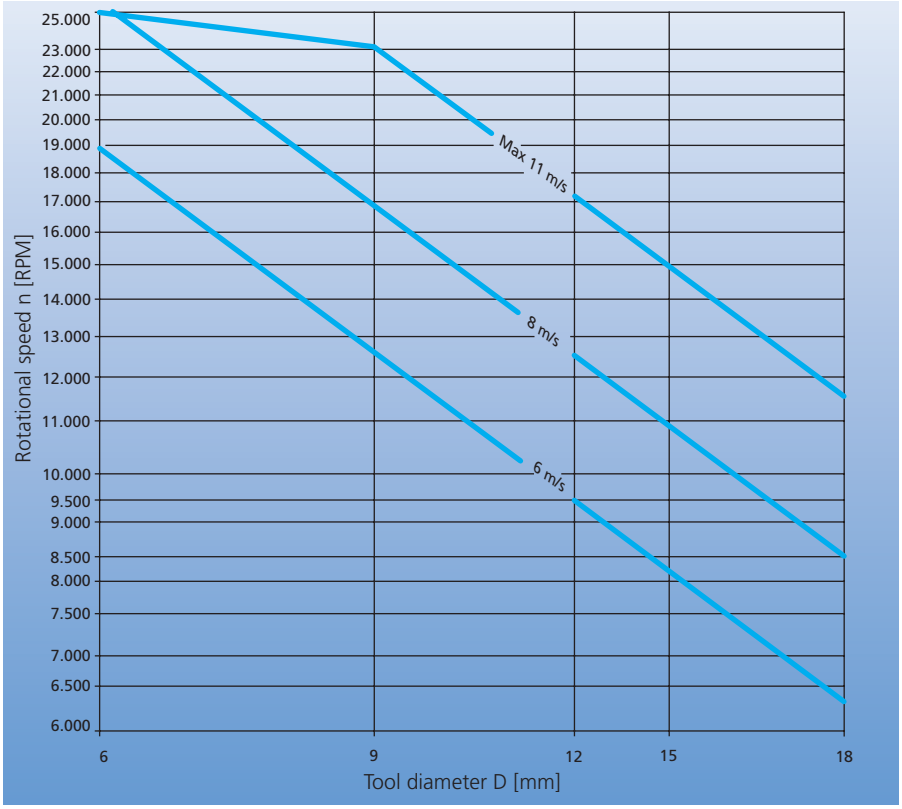
= Read the instructions!

= Not permitted for wet grinding!

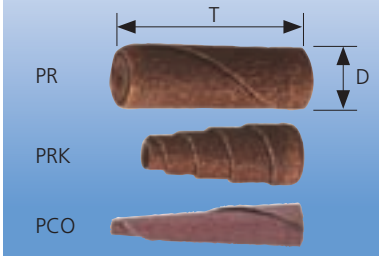
Cutting speed POLIROLL®and POLICO® tools

In this diagram, the cutting speeds are represented using blue diagonal lines. The vertical line representing the tool dia. meets the given cutting speed (diagonals). From its point of intersection proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] of the POLIROLL® and POLICO® tools and machine.

Example:
PR 1225 A 80
Cutting speed: 8 m/s
Speed range: 12.500 RPM



POLIROLL® cartridge rolls, POLICO® abrasive cones



Abrasive: Aluminium oxide A

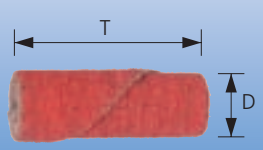
Ordering example:
EAN 4007220**152393**
PR 1225 A 80

How to order:

PR	= POLIROLL® cartridge rolls, cylindrical type
1225	= Dia. D x width T [mm]
A	= Aluminium oxide A
80	= Grit size Please state required grit size.

Order No.	Grit size			D x T [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable matching arbors		
	50	80	150						g
	EAN 4007220								
Cylindrical shape (PR)									
PR 0625 A	-	152300	152317	6 x 25	20.000	25.000	BO 3-18-3, BO 6-18-3	50	60
PR 0635 A	-	152324	152331	6 x 35	20.000	25.000	BO 6-24-3	50	80
PR 0925 A	-	152348	152355	9 x 25	15.000	23.000	BO 6-18-3	50	110
PR 0935 A	-	152362	152379	9 x 35	15.000	23.000	BO 6-24-3	50	170
PR 1225 A	152386	152393	152409	12 x 25	12.000	17.000	BO 6-18-3	50	210
PR 1235 A	152416	152423	152430	12 x 35	12.000	17.000	BO 6-24-3	50	270
PR 1835 A	152447	152454	152461	18 x 35	8.000	12.000	BO 6-25-5	50	600
PR 1850 A	152478	152485	152492	18 x 50	8.000	12.000	BO 6-30-5	50	750
Conical shape (PRK)									
PRK 1025 A	-	152508	152515	10 x 25	15.000	23.000	BO 3-18-3, BO 6-18-3	50	100
PRK 1225 A	152522	152539	152546	12 x 25	12.000	17.000	BO 6-18-3	50	140
PRK 1235 A	152553	152560	152577	12 x 35	12.000	17.000	BO 6-24-3	50	190
PRK 1535 A	152584	152591	152607	15 x 35	10.000	15.000	BO 6-24-3	50	270
POLICO® abrasive cones (PCO)									
PCO 1050 A	-	152614	152621	10 x 50	15.000	23.000	BO 6-50-8	50	170

POLIROLL® cartridge rolls Ceramic oxide CO-COOL



For highly-abrasive grinding with maximum stock removal on hard materials which do not conduct heat well.

Grinding additives in the coating clearly improve stock removal, prevent clogging and give a cooler grind.

Abrasive: Ceramic oxide CO

Ordering example:
EAN 4007220**803394**
PR 1225 CO-COOL 80

How to order:

PR	= POLIROLL® cartridge rolls, cylindrical type
1225	= Dia. D x width T [mm]
A	= Aluminium oxide A
COOL	= Bond type
80	= Grit size Please state required grit size.

Order No.	Grit size			D x T [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable matching arbors		
	60	80	120						g
	EAN 4007220								
PR 0625 CO-COOL	803264	803271	803288	6 x 25	20.000	25.000	BO 3-18-3, BO 6-18-3	50	60
PR 0635 CO-COOL	803295	803301	803318	6 x 35	20.000	25.000	BO 6-24-3	50	80
PR 0925 CO-COOL	803325	803332	803349	9 x 25	15.000	23.000	BO 6-18-3	50	110
PR 0935 CO-COOL	803356	803363	803370	9 x 35	15.000	23.000	BO 6-24-3	50	170
PR 1225 CO-COOL	803387	803394	803400	12 x 25	12.000	17.000	BO 6-18-3	50	210
PR 1235 CO-COOL	803424	803431	803448	12 x 35	12.000	17.000	BO 6-24-3	50	270

PFERD has based the POLIROLL® set tool selection on the most common applications.

Contents pcs. 151:
150 POLIROLL® cartridge rolls with a suitable arbor
- 20 PCS each of PR 0625, A 80 and A 150
- 20 PCS each of PR 0925, A 80 and A 150
- 20 PCS each of PR 1225, A 80 and A 150
- 10 PCS each of PRK 1025, A 80 and A 150
- 10 PCS each of PRK 1225, A 80

POLIROLL® set

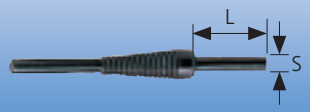
Order No.	EAN 4007220	Dimension [mm]		g
PRS 151	335727	180 x 145 x 40	1	390

Arbors for POLIROLL® and POLICO®

Multiple-use arbor for POLIROLL® and POLICO®. Tool change can be carried out without unclamping the arbor from the tool drive chuck.

Ordering note:
Arbor BO 6-50-8 – suitable for PCO 1050. The angle of the clamping cone is 5°.

Arbors for POLIROLL® and POLICO® grinding tools



Order No.	EAN 4007220	S x L [mm]	Suitable for		g
BO 3-18-3	152171	3 x 27	PR 0625, PRK 1025	1	8
BO 6-18-3	152188	6 x 30	PR 0625, PR 0925, PR 1225, PRK 1025, PRK 1225	1	12
BO 6-24-3	152195	6 x 30	PR 0635, PR 0935, PR 1235, PRK 1235, PRK 1535	1	14
BO 6-25-5	152201	6 x 30	PR 1835	1	20
BO 6-30-5	152218	6 x 30	PR 1850	1	22
BO 6-50-8	152232	6 x 30	PCO 1050	1	22

POLICAP® abrasive caps and cones have a seamless shape. The entire tool surface can be used during grinding. The abrasive caps and cones sit securely on the holders during use, due to their high fitting accuracy.

PFERD provides POLICAP® tools in different shapes, dimensions and grit sizes.

Advantages

- The PFERD range comprises an extensive selection of abrasive caps and cones.
- Cap and cone holders are fully reusable.
- Slots in the holder facilitate its expansion, locking the tool firmly in place.
- The special manufacturing process guarantees good shapeholding and excellent fine-grinding properties.
- Easy tool replacement!

Application examples

- Fine grinding in tool and mould construction.
- For work on hard-to-reach places and bores.

Recommendations for use

- Abrasive caps and cones can be mounted and removed by turning them slightly to the right and pulling at the same time.
- Abrasive caps and cones are easier to replace with the holder mounted on the tool drive.
- Abrasive caps perform best at a recommended cutting speed of 10-20 m/s.
- By using the appropriate grinding oil for the different materials, the tool life and the abrasive performance of the POLICAP® abrasive caps and cones can be substantially increased. For detailed information and order data regarding grinding oils, please refer to page 110.
- The shanks on POLICAP® abrasive cone holders can be lengthened using spindle extensions in order to work on hard-to-reach places e.g. in pipes and ducts. The extension is clamped into the machine chuck (air power / electric) or clamped into the flexible shaft handpiece. This provides a cost-effective replacement for grinding tools with extended shafts.
  Caution! When using spindle extensions, please observe the correct safety and accident prevention regulations.
  Please refer to catalogue 209 for order data regarding spindle extensions.

Safety recommendations

= Wear eye protection!

= Read the instructions!

= Wear gloves!

= Wear hearing protection!

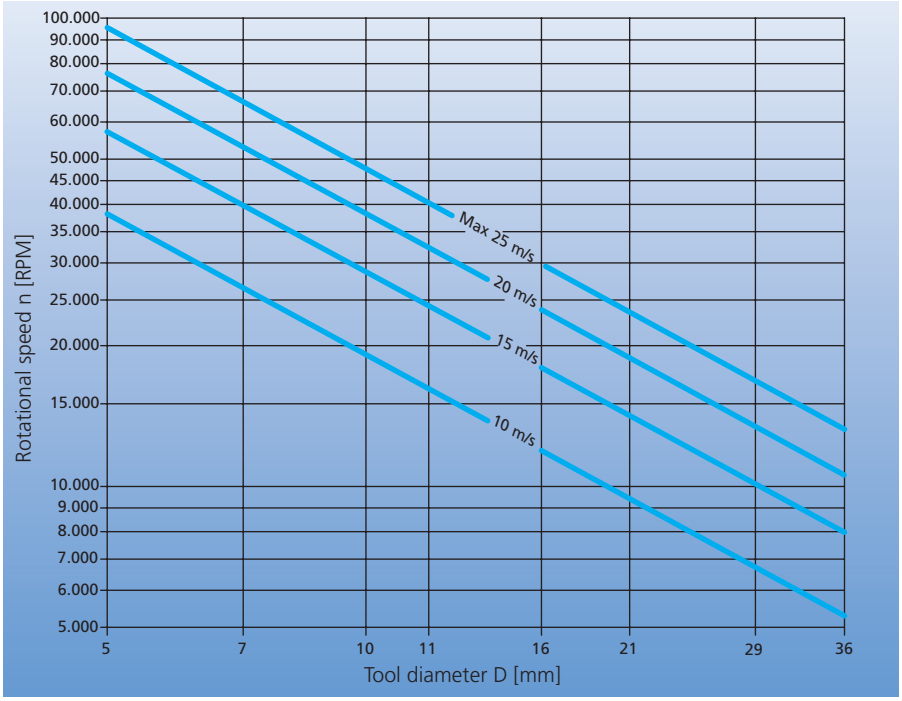
Safety notes

- The maximum approved peripheral speed is 25 m/s.
- For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Cutting speed POLICAP® tools

In this diagram, the cutting speeds are represented using blue diagonal lines. The vertical line representing the tool dia. meets the given cutting speed (diagonals). From its point of intersection proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] of the POLICAP® tools and machine.

Example:
PC 10 A A 150
Cutting speed: 10-20 m/s
Speed range: 19.000-38.000 RPM



POLICAP® Abrasive Caps PC, Abrasive Cap Holder PCT, Shape A

Abrasive: Aluminium oxide A

Grit size colour code:
Brown = Grit size 60 and 80
Black = Grit size 150
Red-brown = Grit size 280

Ordering example:
EAN 4007220**150788**
PC 05 A A 80

How to order:
PC = POLICAP® abrasive caps
05 = Dia. D [mm]
A = Shape cylindrical
A = Aluminium oxide A
80 = Grit size
Please state required grit size.

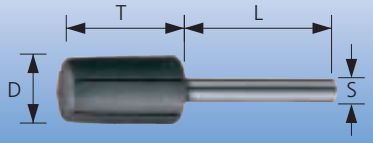
Abrasive caps, shape A

Order No.	Grit size				Recom. speed [RPM]		
	60	80	150	280			g
	EAN 4007220						
PC 05 A A	-	150788	150795	150801	40.000	50	20
PC 07 A A	150818	-	150825	150832	30.000	50	29
PC 10 A A	150849	-	150856	150863	20.000	50	65
PC 13 A A	150870	-	150887	150894	16.000	50	70
PC 16 A A	150900	-	150917	150924	12.000	50	130

Ordering example:
EAN 4007220**147139**
PCT 0510 A/3

How to order:
PCT = POLICAP® abrasive cap holder
0510 = Dia. D x width T [mm]
A = Shape cylindrical
3 = Shank dia. S [mm]

Abrasive cap holder shape A



Order No.	EAN 4007220	D x T [mm]	S x L [mm]	Max. speed [RPM]		g
PCT 0510 A/3	147139	5 x 10	3 x 27	95.000	5	14
PCT 0712 A/3	147146	7 x 12	3 x 25	65.000	5	18
PCT 1015 A/3	147153	10 x 15	3 x 24	45.000	5	24
PCT 1317 A/6	147221	13 x 17	6 x 39	35.000	5	72
PCT 1626 A/6	147238	16 x 26	6 x 39	30.000	5	102

PFERD has based the POLICAP® set tool selection on the most common applications.

Contents PCS 110 A:
- 5 pcs. each of POLICAP® abrasive caps PC (grit size 60/150/280) 10 A, 13 A and 16 A
- 10 pcs. each of POLICAP® abrasive caps PC (grit size 60/150/280) 05 A and 07 A

Matching holders:
- 1 piece each of POLICAP® abrasive cap holder PCT 0510 A, 0712 A, 1015 A, 1317 A and 1626 A

POLICAP® set, shape A

Order No.	EAN 4007220	Dimension [mm]		g
PCS 110 A	355404	180 x 145 x 40	1	250

Abrasive caps, shape C

Abrasive: Aluminium oxide A

Grit size colour code:

Brown	= Grit size 60 and 80
Black	= Grit size 150
Red-brown	= Grit size 280

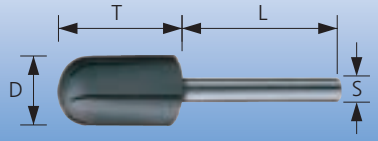
Ordering example:
EAN 4007220**150931**
PC 05 C A 80

How to order:

PC	= POLICAP® abrasive caps
05	= Dia. D [mm]
C	= Shape cylindrical with radius end
A	= Aluminium oxide A
80	= Grit size Please state required grit size.

Order No.	Grit size				Recom. speed [RPM]		
	60	80	150	280			
	EAN 4007220						
PC 05 C A	-	150931	150948	150955	40.000	50	20
PC 07 C A	150962	-	150979	150986	30.000	50	29
PC 10 C A	150993	-	151006	151013	20.000	50	65
PC 13 C A	151020	-	151037	151044	16.000	50	70
PC 16 C A	151051	-	151068	151075	12.000	50	130

Abrasive cap holder, shape C



Ordering example:
EAN 4007220**147160**
PCT 0511 C/3

How to order:

PCT	= POLICAP® abrasive cap holder
0511	= Dia. D x width T mm
C	= Shape cylindrical with radius end
3	= Shank dia. S [mm]

Order No.	EAN 4007220	D x T [mm]	S x L [mm]	Max. speed [RPM]		
PCT 0511 C/3	147160	5 x 11	3 x 26	95.000	5	14
PCT 0713 C/3	147177	7 x 13	3 x 24	65.000	5	18
PCT 1015 C/3	147184	10 x 15	3 x 24	45.000	5	24
PCT 1317 C/6	147245	13 x 17	6 x 39	35.000	5	70
PCT 1626 C/6	147252	16 x 26	6 x 39	30.000	5	99

POLICAP® set, shape C

PFERD has based the POLICAP® set tool selection on the most common applications.

Contents PCS 110 C:
- 5 pcs. each of POLICAP® abrasive caps PC (grit size 60/150/280)
  10 C, 13 C and 16 C
- 10 pcs. each of POLICAP® abrasive caps PC (grit size 60/150/280)
  05 C and 07 C

Matching holders:
- 1 piece each of POLICAP® abrasive cap holder PCT 0511 C, 0713 C, 1015 C, 1317 C and 1626 C

Order No.	EAN 4007220	Dimension [mm]		
PCS 110 C	355411	180 x 145 x 40	1	250

POLICAP® Abrasive Caps PC, Abrasive Cap Holder PCT, Shape G

Abrasive: Aluminium oxide A

Grit size colour code:
Brown = Grit size 60 and 80
Black = Grit size 150
Red-brown = Grit size 280

Ordering example:
EAN 4007220**151082**
PC 05 G A 80

How to order:
PC = POLICAP® abrasive caps
05 = Dia. D [mm]
G = Shape cylindrical with pointed cone
A = Aluminium oxide A
80 = Grit size
Please state required grit size.

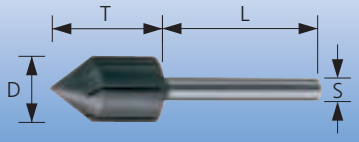
Abrasive cap, shape G

Order No.	Grit size				Recom. speed [RPM]		
	60	80	150	280			
	EAN 4007220						
PC 05 G A	-	151082	151099	151105	40.000	50	20
PC 07 G A	151112	-	151129	151136	30.000	50	29
PC 10 G A	151143	-	151150	151167	20.000	50	45
PC 13 G A	151174	-	151181	151198	16.000	50	60
PC 16 G A	151204	-	151211	151228	12.000	50	105

Ordering example:
EAN 4007220**147207**
PCT 0713 G/3

How to order:
PCT = POLICAP® abrasive cap holder
0713 = Dia. D x width T mm
G = Shape cylindrical with pointed cone
3 = Shank dia. S [mm]

Abrasive cap holder, shape G



Order No.	EAN 4007220	D x T [mm]	S x L [mm]	Max. speed [RPM]		
PCT 0511 G/3	147191	5 x 11	3 x 27	95.000	5	14
PCT 0713 G/3	147207	7 x 13	3 x 26	65.000	5	18
PCT 1015 G/3	147214	10 x 15	3 x 26	45.000	5	22
PCT 1317 G/6	147269	13 x 17	6 x 41	35.000	5	68
PCT 1626 G/6	147276	16 x 26	6 x 41	30.000	5	95

PFERD has based the POLICAP® set tool selection on the most common applications.

Contents PCS 110 G:
- 5 pcs. each of POLICAP® abrasive caps PC (grit size 60/150/280)
  10 G, 13 G and 16 G
- 10 pcs. each of POLICAP® abrasive caps PC (grit size 60/150/280)
  05 G and 07 G

Matching holders:
- 1 piece each POLICAP® abrasive cap holder PCT 0511 G, 0713 G, 1015 G, 1317 G and 1626 G

POLICAP® set, shape G

Order No.	EAN 4007220	Dimension [mm]		
PCS 110 G	355428	180 x 145 x 40	1	250

Abrasive caps, shape L

Abrasive: Aluminium oxide A

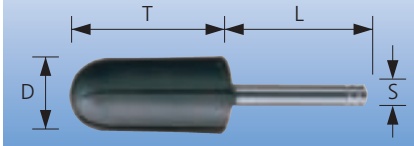
Grit size colour code:
Brown = Grit size 60 and 80
Black = Grit size 150
Red-brown = Grit size 280

Ordering example:
EAN 4007220**151235**
PC 05 L A 80

How to order:
PC = POLICAP® abrasive caps
05 = Dia. D [mm]
L = Shape tapered
A = Aluminium oxide A
80 = Grit size
Please state required grit size.

Order No.	Grit size				Recom. speed [RPM]		
	60	80	150	280			
	EAN 4007220						
PC 05 L A	-	151235	151242	151259	40.000	50	27
PC 11 L A	151266	-	151273	151280	20.000	50	91
PC 16 L A	151297	-	151303	151310	12.000	50	145
PC 21 L A	151327	-	151334	151341	9.500	50	255

Abrasive cap holder, shape L

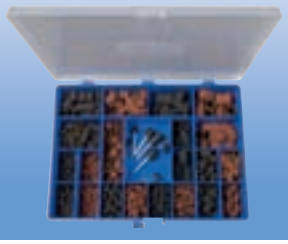


Ordering example:
EAN 4007220**147283**
PCT 0515 L/6

How to order:
PCT = POLICAP® abrasive cap holder
0515 = Dia. D x width T [mm]
L = Shape tapered
6 = Shank dia. S [mm]

Order No.	EAN 4007220	D x T [mm]	S x L [mm]	Max. speed [RPM]		
PCT 0515 L/6	147283	5 x 15	6 x 40	95.000	5	48
PCT 1125 L/6	147290	11 x 25	6 x 40	40.000	5	79
PCT 1632 L/6	147306	16 x 32	6 x 40	30.000	5	106
PCT 2140 L/6	147313	21 x 40	6 x 40	20.000	5	155

POLICAP® set PCS 650



PFERD has based the POLICAP® set tool selection on the most common applications.

Contents PCS 650:
- 10 piece each of POLICAP® abrasive caps PC (grit size 150/280)
  16 A and 16 G
- 25 pcs. each of POLICAP® abrasive caps PC (grit size 150/280)
  10 A, 13 A, 10 G and 13 G
- 50 pcs. each of POLICAP® abrasive caps PC (grit size 150/280)
  05 A, 07 A, 05 G and 07 G

Matching holders:
- 1 piece each of POLICAP® abrasive cap holder PCT 0510 A, 0712 A, 1317 A, 1626 A, 0511 G, 0713 G, 1015 G, 1317 G and 1626 G

Order No.	EAN 4007220	Dimension [mm]		
PCS 650	355435	332 x 235 x 50	1	1.000

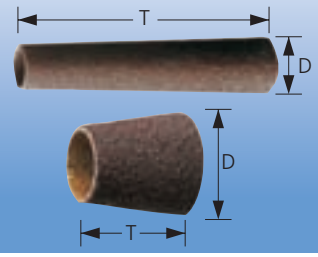
Abrasive: Aluminium oxide A

Colour code system:
Brown = Grit size 60
Black = Grit size 150
Red-brown = Grit size 280

Ordering example:
EAN 4007220**151471**
PCH 2065 L A 60

How to order:
PCH = POLICAP® abrasive cone
2065 = Dia. D x width T [mm]
L = Shape tapered
A = Aluminium oxide A
60 = Grit size
Please state required grit size.

POLICAP® abrasive cones

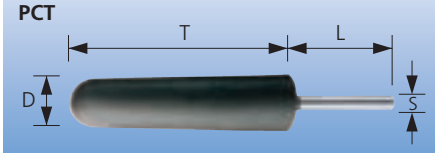


Order No.	Grit size			Recom. speed [RPM]	Suitable matching arbors		
	60	150	280				g
	EAN 4007220						
PCH 05 L A	151358	151365	151372	12.000	PCT 0585	10	37
PCH 11 L A	151389	151396	-	12.000	PCT 1185	10	65
PCH 16 L A	151419	151426	-	12.000	PCT 1685	10	84
PCH 21 L A	151440	151457	-	12.000	PCT 2185	10	110
PCH 2065 L A	151471	151488	151495	18.500	GK 201463	10	67
PCH 3665 L A	151532	151549	-	13.000	GK 362260	10	120

Ordering example:
EAN 4007220**147320**
PCT 0585 L/6

How to order:
PCT = POLICAP® rubber abrasive cone holder
0585 = Dia. D x width T [mm]
L = Shape tapered
6 = Shank dia. S [mm]

POLICAP® rubber abrasive cone holders PCT



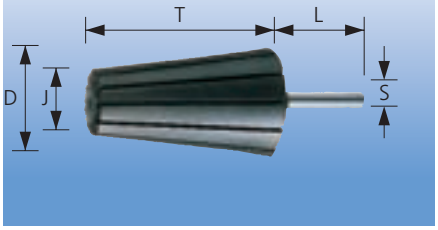
Order No.	EAN 4007220	D x T [mm]	S x L [mm]	Max. speed [RPM]		g
PCT 0585 L/6	147320	8 x 85	6 x 40	20.000	5	100
PCT 1185 L/6	147337	13 x 85	6 x 40	15.000	5	170
PCT 1685 L/6	147344	18 x 85	6 x 40	13.000	5	250
PCT 2185 L/6	147351	23 x 85	6 x 40	12.000	5	350

Rubber Drum Holders

Ordering example:
EAN 4007220**147078**
GK 201463/6

How to order:
GK = POLICAP® rubber abrasive cone holder
201463 = Dia. D x width small dia. J x width T [mm]
6 = Shank dia. S [mm]

POLICAP® rubber drum holders GK



Order No.	EAN 4007220	D x J x T [mm]	S x L [mm]	Max. speed [RPM]	Minimum speed [RPM]		g
Conical type							
GK 201463/6	147078	20 x 14 x 63	6 x 37	26.000	19.000	5	190
GK 362260/6	147092	36 x 22 x 60	6 x 40	15.900	10.000	5	370

The coated abrasive elements are arranged radially around the tool axis in a fan-type configuration. Due to their flexibility, they adapt ideally to the contours of the workpiece. The abrasive grain is embedded in a resinoid bond on the strong flexible backing cloth.

PFERD Flap brushes are designated "Element mounted points" acc. ISO 3919.

Fan grinders come in the standard 40 mm shank length. Versions with threaded shank (made to order) can be supplied by special arrangement.

Safety recommendations

= Wear eye protection!

= Wear hearing protection!

= Wear gloves!

= Read the instructions!

Cutting speed flap brushes

In this diagram, the cutting speeds are represented using blue diagonal lines. The vertical line representing the tool dia. meets the given cutting speed (diagonals). From its point of intersection proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] of the flap brushes and machine.

Example:
F 6030/6 A 120
Cutting speed: 15-20 m/s
Speed range: 4.750-6.350 RPM

Advantages

- High flexibility.
- High stock removal due to aggressive coated abrasive.
- Flaps wear off uniformly and without residue on the workpiece surface, ensuring adequate availability of sharp grit at all times.
- Due to the special cast core construction, the face of the tool can be worked up very close to the edges and corners.

Application examples

- Fine-grinding of radii in tool, die and mouldmaking applications.
- Grinding small or hard-to-reach surfaces in tank and process equipment construction.
- Finishing work on valves and fittings made of non-ferrous metals or light alloys.
- Grinding of turbine blades in jet engine assembly and maintenance.

Recommendations for use

- Fan grinders perform best at the recommended cutting speed of 15-20 m/s, where the optimum balance between stock removal, surface finishing quality, workpiece temperature loads and tool wear is achieved.
- The use of the appropriate grinding oil on the different materials can substantially increase the tool life and the abrasive performance of the flap brushes. For detailed information and order data on grinding oils, please refer to page 110.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.

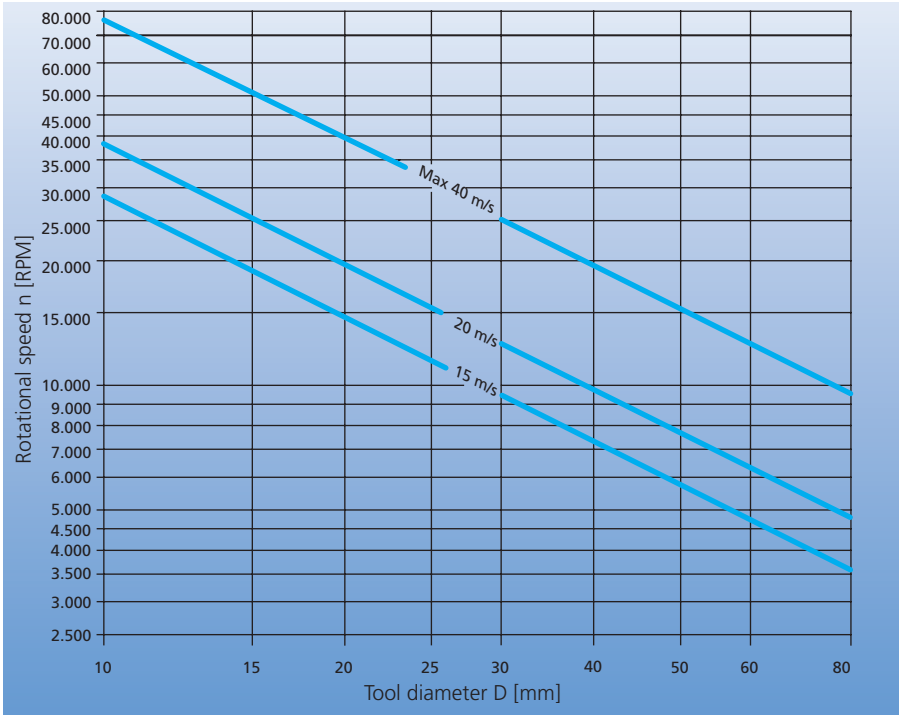
Factors influencing the grinding result

- **Tool wear and workpiece temperature load:**
  Reducing the grinding pressure and the circumferential speed and adding grinding oil reduces tools wear and the thermal loads on the workpieces.
- **Material removal rate:**
  To achieve higher stock removal it is recommended to use coarser grit rather than more contact pressure, which may result in premature tool wear and excessive heat input into the workpiece.
- **Surface roughness:**
  Use of a higher cutting speed will yield a slightly finer surface finish.
  Increasing the contact pressure will result in a somewhat coarser surface.
  The surface roughness obtained increases with the softness of the material (for tools of the same grit size).

Safety notes

For safety reasons, it is imperative to remain within the stated RPM limit at all times. To maintain safe operating conditions, always ensure that:

- the shank clamping depth is at least 15 mm.
- the maximum RPM limit is not exceeded with open shank lengths.



The aluminium oxide A type are universally suitable for all metals.

Abrasive: Aluminium oxide A

The fan grinders F 3010, F 3015, F 4015, F 4020, F 5020, F 5030, F 6015, F 6020, F 6030, F 6040, F 8030, F 8040 and F 8050 accord with the ISO 3919.

Please refer to the order no. for the fan grinder D x T [mm], dimensions.

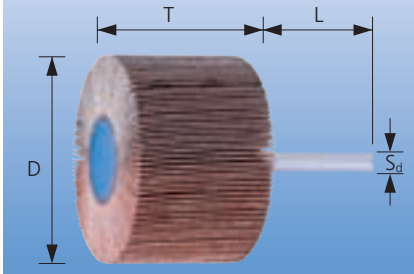
Packaging unit: 10 pcs.

Ordering example:
EAN 4007220**155455**
F 6030/6 A 120

How to order:

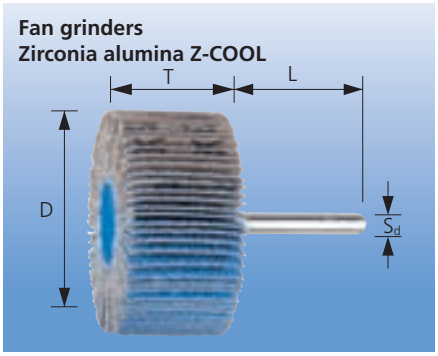
F	= Fan grinder
6030	= Dia. D x width T [mm]
6	= Shank dia. S_d [mm]
A	= Aluminium oxide A
120	= Grit size Please state required grit size.

Fan grinders
Aluminium oxide A



Order No.	Grit size									S_d x L mm	Recom. speed [RPM]	Max. speed [RPM]	g
	40	60	80	120	150	180	240	320	400				
	EAN 4007220												
Shank ø 3 mm													
F 1010/3 A	-	661529	661635	661642	661659	661673	-	661680	-	3 x 40	38.000	75.000	50
F 1015/3 A	-	661697	661703	661710	661727	661734	-	661741	-	3 x 40	38.000	75.000	55
F 1505/3 A	-	661758	661765	661772	661796	661802	-	661819	-	3 x 40	25.000	50.000	50
F 1510/3 A	-	661871	661918	661925	661932	661963	-	661987	-	3 x 40	25.000	50.000	65
F 1515/3 A	-	661994	662014	662038	662045	662052	-	662069	-	3 x 40	25.000	50.000	75
F 2010/3 A	-	-	-	154113	154120	292563	-	-	-	3 x 40	19.000	38.100	84
F 3005/3 A	-	154137	154151	154175	154199	292693	154212	154236	-	3 x 40	12.000	25.400	90
F 3010/3 A	-	154250	154274	154298	154311	292716	154335	154359	-	3 x 40	12.000	25.400	117
Shank ø 6 mm													
F 2010/6 A	-	-	292594	292617	292624	292631	-	-	-	6 x 40	19.000	38.100	148
F 2510/6 A	-	-	536896	536902	-	536919	-	-	-	6 x 40	15.000	30.500	183
F 2515/6 A	-	-	154557	154564	154571	292648	-	-	-	6 x 40	15.000	30.500	203
F 2520/6 A	-	-	536926	536933	-	536940	-	-	-	6 x 40	15.000	30.500	241
F 2525/6 A	-	-	292655	292662	292679	292686	-	-	-	6 x 40	15.000	30.500	270
F 3005/6 A	-	154144	154168	154182	154205	292709	154229	154243	-	6 x 40	12.000	25.400	150
F 3010/6 A	-	154267	154281	154304	154328	292723	154342	154366	533017	6 x 40	12.000	25.400	181
F 3015/6 A	-	154687	154694	154700	154717	292730	154724	154731	-	6 x 40	12.000	25.400	250
F 3030/6 A	-	292747	292754	292761	292778	292785	292792	292808	-	6 x 40	12.000	25.400	350
F 4010/6 A	-	154373	154380	154403	154410	292815	154427	-	-	6 x 40	9.600	19.100	250
F 4015/6 A	-	154441	154458	154465	154489	292822	154496	154519	-	6 x 40	9.600	19.100	305
F 4020/6 A	800607	154625	154632	154649	154656	292839	154663	-	-	6 x 40	9.600	19.100	360
F 5010/6 A	-	155189	155196	155202	155219	292846	155226	155233	-	6 x 40	7.000	15.200	340
F 5015/6 A	-	155240	155257	155264	155271	292853	155288	155295	-	6 x 40	7.000	15.200	425
F 5020/6 A	-	155127	155134	155141	155158	292860	-	155172	-	6 x 40	7.000	15.200	515
F 5030/6 A	800591	155066	155073	155080	155097	292877	155103	155110	-	6 x 40	7.000	15.200	780
F 6015/6 A	-	155301	155318	155325	155332	-	155349	155356	-	6 x 40	6.300	12.700	555
F 6020/6 A	-	155363	155370	155387	155394	-	155400	155417	-	6 x 40	6.300	12.700	680
F 6030/6 A	155424	155431	155448	155455	155462	292907	155479	155486	533024	6 x 40	6.300	12.700	930
F 6040/6 A	-	155493	155509	155516	155523	-	155530	-	-	6 x 40	6.300	12.700	1.180
F 6050/6 A	155554	155561	155578	155585	155592	-	155608	155615	-	6 x 40	6.300	12.700	1.440
F 8015/6 A	-	155622	155639	155646	155653	-	-	-	-	6 x 40	4.800	9.500	800
F 8020/6 A	-	155684	155691	155707	155714	-	-	-	-	6 x 40	4.800	9.500	990
F 8030/6 A	155745	155752	155769	155776	155783	-	155790	155806	-	6 x 40	4.800	9.500	1.405
F 8040/6 A	-	155813	155820	155837	155844	-	155851	-	-	6 x 40	4.800	9.500	1.770
F 8050/6 A	155875	155882	155899	155905	155912	-	155929	155936	-	6 x 40	4.800	9.500	2.175

Fan grinders
Zirconia alumina Z-COOL



The zirconia alumina Z-COOL type is designed especially for work on stainless steel (INOX) and high-temperature alloys.

These tools provide high stock removal rates and particularly cool grinding action (abrasive will not load up).

Abrasive: Zirconia alumina Z-COOL

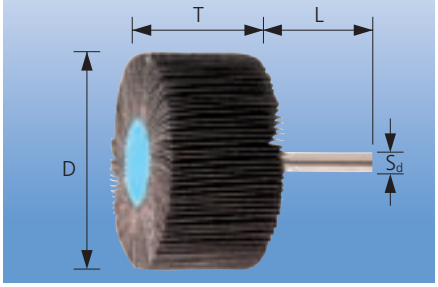
Ordering example:
EAN 4007220**297353**
F 3020/6 Z-COOL 60

How to order:

F	= Fan grinder
3020	= Dia. D x width T [mm]
6	= Shank dia. S_d [mm]
Z	= Zirconia alumina Z
COOL	= Bond type
60	= Grit size
	Please state required grit size.

Order No.	Grit size		D x T [mm]	S_d x L mm	Acc. to ISO standards	Recom. speed [RPM]	Max. speed [RPM]		
	60	80							g
	EAN 4007220								
F 3020/6 Z-COOL	297353	297360	30 x 20	6 x 40	3919	12.000	25.400	10	280
F 4020/6 Z-COOL	297377	297384	40 x 20	6 x 40	3919	9.600	19.100	10	360
F 5020/6 Z-COOL	297391	297407	50 x 20	6 x 40	3919	7.000	15.200	10	515
F 6030/6 Z-COOL	297414	297421	60 x 30	6 x 40	3919	6.300	12.700	10	930
F 8050/6 Z-COOL	297438	297445	80 x 50	6 x 40	3919	4.800	9.500	10	2.175

Fan grinders
Silicon carbide SiC



The silicon carbide SiC type is suitable for work on hard and tough materials, e.g. titanium and its alloys. It is also ideally suited for work on copper and bronze.

The SiC abrasive produces a particularly fine surface finishing.

Abrasive: SiC (silicon carbide)

Ordering example:
EAN 4007220**155943**
F 6030/6 C 60

How to order:

F	= Fan grinder
6030	= Dia. D x width T [mm]
6	= Shank dia. S_d [mm]
C	= Silicon carbide SiC
60	= Grit size
	Please state required grit size.

Order No.	Grit size				D x T [mm]	S_d x L mm	Acc. to ISO standards	Recom. speed [RPM]	Max. speed [RPM]		
	60	80	120	150							g
	EAN 4007220										
F 3010/6 C	154588	154595	154601	154618	30 x 10	6 x 40	3919	12.000	25.400	10	178
F 6030/6 C	155943	155950	155967	155974	60 x 30	6 x 40	3919	6.300	12.700	10	910

For aggressive grinding with maximum stock removal on materials which do not conduct heat well.

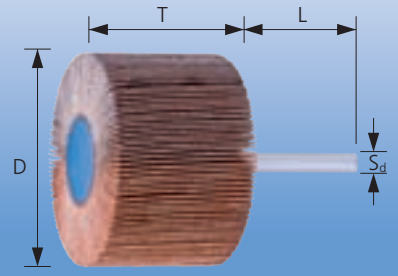
Grinding additives in the coating clearly improve stock removal, prevent clogging and allow cooler grinding.

Abrasive: Ceramic oxide CO-COOL

Ordering example:
EAN 4007220**803936**
F 6030/6 CO-COOL 120

How to order:
F = Fan grinder
6030 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]
CO = Ceramic oxide CO
COOL = Bond type
120 = Grit size
Please state required grit size.

Fan grinders
Ceramic oxide CO-COOL



Order No.	Grit size				D x T [mm]	S_d x L mm	Recom. speed [RPM]	Max. speed [RPM]		g
	40	60	80	120						
	EAN 4007220									
F 3010/6 CO-COOL	803738	803745	803752	803769	30 x 10	6 x 40	12.000	25.400	10	185
F 3015/6 CO-COOL	803776	803783	803790	803806	30 x 15	6 x 40	12.000	25.400	10	250
F 4020/6 CO-COOL	803813	803820	803837	803844	40 x 20	6 x 40	9.600	19.100	10	360
F 5030/6 CO-COOL	803868	803875	803899	803882	50 x 30	6 x 40	7.000	15.200	10	780
F 6030/6 CO-COOL	803905	803912	803929	803936	60 x 30	6 x 40	6.300	12.700	10	930

The contents of the sets are based on the most common applications in industry and crafts.

The sales-promoting display box for shops contains 40 fan grinders in the aluminium oxide A type, shank dia. 6 mm.

Contents: 5 pcs. each of
F 4015/6 A 80
F 4015/6 A 120
F 5015/6 A 60
F 5015/6 A 80
F 6030/6 A 60
F 6040/6 A 80
F 6040/6 A 150
F 8030/6 A 60

Fan grinder set

Order No.	EAN 4007220	Dimension [mm]		g
FSO 5400	156087	240 x 145 x 240	1	3.770

The coated abrasive elements are arranged radially around the tool axis in a fan-type configuration. Due to their flexibility, they adapt ideally to the contours of the workpiece. The abrasive grain is embedded in a resinoid bond on the strong flexible backing cloth.
Flap wheels are designated "Element grinding discs" according to ISO 5429.
Flap wheels ø 100, 150 and 165 mm are supplied with a 25,4 mm centre hole.
Flap wheels ø 200 and 250 mm are supplied with a 44,0 mm centre hole.

Safety recommendations

= Wear eye protection!

= Wear hearing protection!

= Wear gloves!

= Read the instructions!

Advantages

- High flexibility.
- High stock removal due to aggressive coated abrasive product.
- Flaps wear off uniformly and without residue on the workpiece surface, ensuring adequate availability of sharp grit at all times.
- Due to the special mounting system, the face of the wheel can be worked up very close to the edges and corners.

Application examples

- Fine grinding on large radii, e.g. during assembly of tanks, kitchens and process equipment.
- Removal of major surface irregularities (e.g. weld dressing).
- Production of homogeneous surface patterns on large surfaces and contours with handheld tool drives.
- Fine-grinding in preparation of high-gloss polishing.
- Also suitable for robotic and stationary usage.

Recommendations for use

- Flap wheels perform best at the recommended peripheral speed of 15-30 m/s, where the optimum balance between stock removal, surface finishing quality, workpiece temperature loads and tool wear is achieved.
- Suitable drive systems include flexible shafts, straight grinders and bench grinders.
- The drive system must provide an output of 1.000 to 1.500 watts.
- Use of the correct grinding oil on each different material can substantially increase the service life and abrasive performance of flap wheels. For detailed information and order data on grinding oils, please refer to page 110.

Factors influencing the grinding result

- **Tool wear and workpiece temperature load:**
  The heat load on the workpiece material and the tool wear can be reduced substantially by working with reduced contact pressure and adding a cooling lubricant (grease/oil).
- **Material removal rate:**
  To achieve higher stock removal it is recommended to use coarser grit rather than more contact pressure, which may result in premature tool wear and workpiece overheating.
- **Surface roughness:**
  Use of a higher peripheral speed will produce a slightly finer surface finish. Increasing the contact pressure will produce a somewhat coarser surface.
  The surface roughness obtained increases with the softness of the material (for tools of identical grit size).

Safety notes

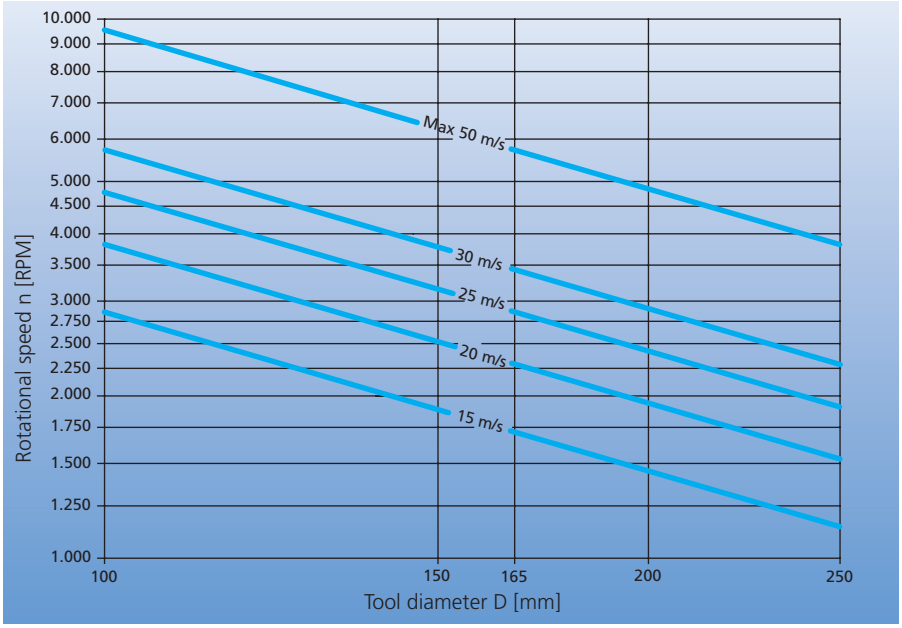
Flap wheels must always be used with matching clamping flanges.
The maximum permissible circumferential speed is
- 50 m/s for the FR flap wheels
- and 80 m/s for the FR-WS flap wheels.

For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Cutting speed flap wheels

In this diagram, the cutting speeds are represented using blue diagonal lines. The vertical line representing the tool dia. meets the given cutting speed (diagonals). From its point of intersection with the diagonal line for a given peripheral speed, proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] of the flap wheels.

Example:
FR 16550 / 25,4 A 80
Cutting speed: 15-30 m/s
Speed range: 1.700-3.500 RPM



The aluminium oxide A type is universally suitable for all metals.

Abrasive: Aluminium oxide A

Flap wheels FR 10050, FR 15050, FR 16550, FR 20050 and FR 25050 accord with ISO 5429.

Suitable arbor for ø 100, 150 and 165 mm: FR/VR 12/25,4.

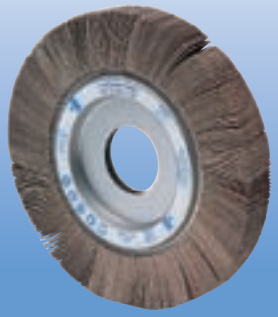
Suitable arbor for ø 200 and 250 mm: FR/VR 12/44,0

Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**469040**
FR 10030/25,4 A 40

How to order:
FR = Flap wheel
10030 = Dia. D x width T [mm]
25,4 = Centre hole dia. H [mm]
A = Aluminium oxide A
40 = Grit size
Please state required grit size.

Flap wheels
Aluminium oxide A



Order No.	Grit size							D x T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
	40	60	80	120	150	240	320						
	EAN 4007220												
FR 10030/25,4 A	469040	469057	469071	469095	-	-	-	100 x 30	25,4	5.500	9.500	2	430
FR 10050/25,4 A	469187	469194	469224	469231	-	-	-	100 x 50	25,4	5.500	9.500	2	720
FR 15030/25,4 A	296851	296868	296875	296882	296899	-	-	150 x 30	25,4	3.500	6.300	2	930
FR 15050/25,4 A	296905	296912	296929	296936	296943	469699	-	150 x 50	25,4	3.500	6.300	2	1.490
FR 16530/25,4 A	470091	470107	470114	470121	470138	469941	-	165 x 30	25,4	3.200	5.700	2	1.025
FR 16550/25,4 A	469767	469781	469804	469811	469835	469842	469859	165 x 50	25,4	3.200	5.700	2	1.700
FR 20030/44,0 A	-	469606	469613	469637	-	469675	-	200 x 30	44,0	2.600	4.700	2	2.075
FR 20050/44,0 A	-	469262	469286	469309	469323	469347	-	200 x 50	44,0	2.600	4.700	2	3.175
FR 25050/44,0 A	-	469064	469088	469101	469132	469156	469170	250 x 50	44,0	2.100	3.800	1	1.920

A-COOL versions are purpose-designed for work on stainless steel (INOX) and high-temperature alloys.

These tools guarantee a high abrasive performance and particularly cool grinding action (tool will not load up).

Abrasive: Aluminium oxide A-COOL
Flap wheels FR 15050 and FR 16550 accord with ISO 5429.

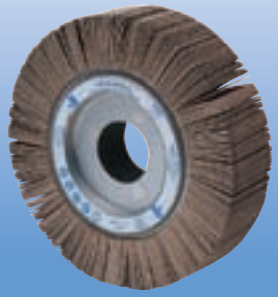
Suitable arbor for ø 150 and 165 mm: FR/VR 12/25,4.

Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**469576**
FR 15030/25,4 A-COOL 40

How to order:
FR = Flap wheel
15030 = Dia. D x width T [mm]
25,4 = Centre hole dia. H [mm]
A = Aluminium oxide A
COOL = Bond type
40 = Grit size
Please state required grit size.

Flap wheels
Aluminium oxide A-COOL



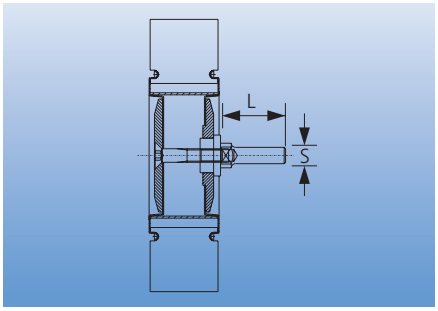
Order No.	Grit size				D x T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
	40	60	80	120						
	EAN 4007220									
FR 15030/25,4 A-COOL	469576	469590	-	469668	150 x 30	25,4	3.500	6.300	2	1.000
FR 15050/25,4 A-COOL	469743	469774	469798	-	150 x 50	25,4	3.500	6.300	2	1.490
FR 16530/25,4 A-COOL	469989	470008	470015	470022	165 x 30	25,4	3.200	5.700	2	1.025
FR 16550/25,4 A-COOL	469866	469873	469903	469910	165 x 50	25,4	3.200	5.700	2	1.700

Flap wheel arbors with flange

Arbors with clamping flanges are used to mount PFERD flap wheels.
The clamping flanges are constructed, so that they lie countersunk within the tool. It is then possible to grind in very narrow places on edges and in corners using flap wheels.

Supplied content:
1 arbor, clamp dia. 12 mm
2 flanges
matching screws (for different flap wheel widths).

Ordering note:
Arbors with Morse taper can be manufactured to order. Please enquire.

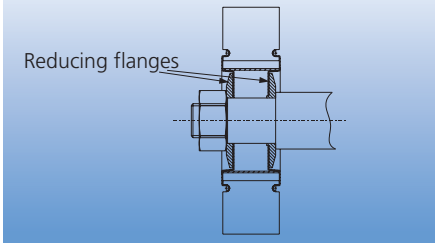


Order No.	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole [mm]	Suitable for tool dia. [mm]		g
FR/VR 12/25,4 100-165	479643	12 x 40	25-50	25,4	100, 150, 165	1	199
FR/VR 12/44,0 200-250	479650	12 x 40	25-50	44,0	200, 250	1	538

Reducing flanges for flap wheels

These reducing flanges can be used to mount PFERD flap wheels. The flange centre hole can be enlarged by boring to match the spindle diameter in use.
The clamping flanges are designed to lie hidden in the tool recess.

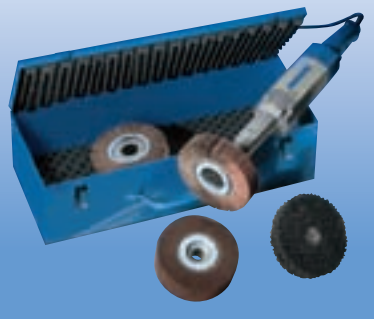
Supplied content:
1 pair, standard hole dia.: 12 mm



Order No.	EAN 4007220	Cent. hole dia. [mm]	Suitable for centre hole [mm]	Suitable for tool dia. [mm]		g
RF FR 150-165 Bo. 12-22,2	509876	12-22,2	22,2	150, 165	1	118
RF FR 200-250 Bo. 12-40	498460	12-40	40,0	200, 250	1	504

Tool Sets
Tool Sets with Drives

Flap wheel set



High-power output electric grinder in set with PFERD tools for cleaning, brush matting, fine grinding of medium and large surfaces, in particular on stainless steel (INOX). Ideal for general-purpose grinding, in particular on construction sites.
High, consistent speed performance, even under loads. Insulated motor, integrated overload protection, user-friendly, robust construction. Stepless electronic speed regulation within the 2.800 to 5.900 RPM speed range.

Please refer to catalogue 209 for detailed information and order data regarding tool drives.

Contents:
- 1 electric grinder UGER 15/60 SI 230 V
- 1 collet each in dia. 6, 8 and 12 mm
- 2 POLICLEAN® wheels PCLS 15013/13
- 1 Flap wheel 15030 A-COOL 60
- 1 Flap wheel 15030 A-COOL 120
- 1 POLINOX® grinding wheel PNL 15050 A100
- 1 arbor FR/VR 12/25,4
- 1 arbor BO 8/13/26

Recommendation for use:
The result of surface work on stainless steel (INOX) depends on different factors:
It depends on the interaction of:
- Tools (abrasive grit size and type),
- cutting speed,
- grinding pressure,
- processing time and
- stainless steel quality being worked on.

Order No.	EAN 4007220		g
SET FR 15030 UGER 15/60 230 V	777350	1	11.000

The ideal tool for use on angle grinders in assembly shop operations.

Abrasive: Aluminium oxide A

Recommendation for use:
Flap wheels for angle grinders perform best at the recommended cutting speed of 40-50 m/s.

Ordering example:
EAN 4007220**752364**
FR-WS 11520 M14 A 40
Please state required grit size.

Flap wheels for angle grinders

Order No.	Grit size				D x T [mm]	Thread H	Recom. speed [RPM]	Max. speed [RPM]		
	40	60	80	120						g
	EAN 4007220									
FR-WS 11520 M 14 A	752364	752388	752395	752401	115 x 20	M 14	7.500	13.300	2	400
FR-WS 12520 M 14 A	752418	752425	752432	752449	125 x 20	M 14	6.850	12.200	2	490

Can be used on all materials.

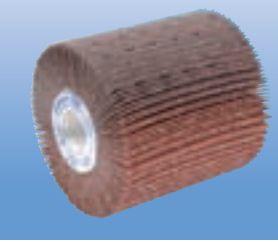
Examples of use:
- Fine grinding work on large radii in container, kitchen and apparatus construction.
- Removal of rough unevenness e.g. weld dressing.
- Achieving homogeneous grinding patterns on large surfaces and contours with hand-guided applications (patterns).
- Finest grinding as a preliminary stage to polishing.

Abrasive: Aluminium oxide A

Recommendation for use:
Flap rolls produce the best results at the recommended peripheral speed of 15-30 m/s.

Ordering note:
For further roller tools, please refer to pages 78 and 102 in this catalogue and catalogue 208.

Flap drums



Order No.	Grit size						D x T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]		
	40	60	80	120	150	180						g
	EAN 4007220											
FR-W 100100 A	770498	770504	770511	770528	770535	770542	100 x 100	19	3.800	6.100	1	550

Tool Sets
Tool Sets with Drives

High-power output electric grinding drum drive as part of a set with PFERD tools for cleaning, brush matting and fine grinding of large surfaces, especially for stainless steel (INOX).

Machine and roller tools in a practical case, arranged neatly and suitable for mobile use. Stepless electronic speed regulation within the 900 to 3.500 RPM speed range.

Refer to catalogue 209 for detailed information and order data regarding tool drives.

Contents:
- 1 electric grinding drum drive UWER 15/40 SI D19
- 1 hexagon socket wrench 6 mm
- 1 combination wrench SW 13 mm
- 1 flap drum FR-W 100100 A 80
- 1 POLINOX® grinding drum PNL-W 100100 A 180

Three empty storage compartments provide space for further roller tools from the PFERD range.

Roller set

Order No.	EAN 4007220		g
SET FR-W 100100 UWER 15/40 230 V	777299	1	9.400

POLIFLAP® grinding wheel

The grinding wheel consists of a shankmounted (S_d = ø 12 mm) hub carrying an array of rubber flaps. For use, appropriate abrasive flaps must be fitted between their rubber counterparts.
The combination arrangement of abrasive and rubber flaps results in a highly flexible tool.

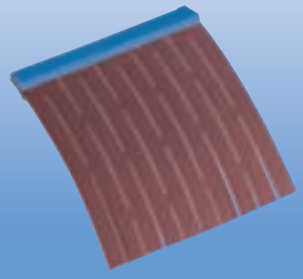
Application examples:
- Redressing and restoration of surface textures.
- Fine-grinding of radii, contours, curved areas or large surfaces.
- Removal of fine secondary burr.
- Removal of heat discoloration.
- Surface cleaning.

Recommendation for use:
This product is used preferably on straight grinders and flexible shaft systems.
On stainless steel, an optimum surface finish is obtained in the 1.400-1.700 RPM speed range.

Ordering note:
POLIFLAP® grinding wheels are supplied without abrasive flaps. Please order abrasive flaps separately, specifying the desired grit size (refer to the table at centre page).

Order No.	EAN 4007220	D x T [mm]	S_d [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
PFL 17060/12	725405	170 x 60	12	1.500	3.500	1	590

POLIFLAP® abrasive flaps

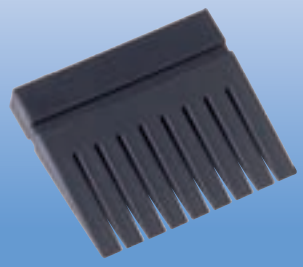


PFERD has eight different grit sizes to help you achieve the required visual effect.
After the abrasive elements have worn down, they can easily be replaced on the grinding wheel.
In order to be completely equipped, you require 12 abrasive flaps (1 pack).
Please order the initial flaps and any additional flaps as separate items.

Ordering example:
EAN 4007220**725276**
PFL-SL A 60
Please state the required grit size.

Order No.	Grit size								Width x length T x L [mm]		g
	60	80	100	120	150	180	220	320			
	EAN 4007220										
PFL-SL A	725276	725283	725290	725306	725313	725320	725337	725344	60 x 75	12	100

POLIFLAP® rubber flaps



The rubber flaps which lie between the abrasive flaps support the grinding effect and the flexibility of the tool.
After the rubber flaps have worn down, they can easily be replaced on the grinding wheel.
In order to fill the wheel, you require 12 rubber flaps (1 pack).

Order No.	EAN 4007220	Width x length T x L [mm]		g
PFL-GL	725412	55 x 50	12	190

High-power output electric grinder in set with PFERD tools for brush matting, and for blending on medium and large surfaces, in particular on stainless steel (INOX).

High, consistent speed performance, even under load. Insulated motor, integrated overload protection, user-friendly, robust construction. Stepless slectronic speed regulation within the 750 to 3.000 RPM speed range.
Please refer to catalogue 209 for information and order data regarding tool drives.

Contents:
- 1 electric grinder UGER 15/30 SI
- 1 collet each, ø 6, 8 and 12 mm
- 1 hexagon socket wrench 6 mm
- 2 single-head spanners SW 22
- 1 POLIFLAP® grinding wheel PFL 17060/12
- with abrasive flaps PFL-SL grit sizes (A 60, A 80, A 100, A 120, A 150, A 180, A 220, A 320)
- 1 POLINOX® mounted point PNG 10050/6 SiC 180
- 1 Poliflex® mounted texturing point PF ZY 10030/8 CU 16 PU-STRUC

POLIFLAP® set

Order No.	EAN 4007220		g
SET PFL 17060 UGER 15/30 SI 230 V	777343	1	9.200

Coated Abrasive Tools
Overlap Slotted Discs

Special tools for side grinding in fillets and slots. They are mounted via a central threaded hub.

Advantages:
- Tool provides abrasive action on both its front and rear side.
- The two-sided overlapping fan structure is flexible and ideal for deburring in grooves, slots and finned structures.

Recommendation for use:
By holding the tool at an angle it is possible to machine opposing slot faces simultaneously.

Ordering note:
Please order arbors separately.

Ordering example:
EAN 4007220**152706**
KS 30-4 A 80

How to order:

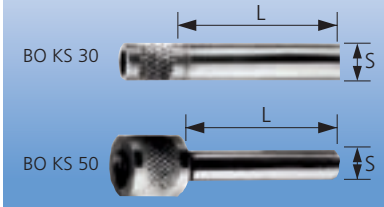
KS	= Overlap slotted disc
30	= Dia. D [mm]
4	= No. of layers
A	= Aluminium oxide A
80	= Grit size

Overlap slotted discs

Order No.	Grit size	EAN 4007220	D x T [mm]	No. of layers	Recom. speed [RPM]	Max. speed [RPM]	Suitable arbor		g
KS 30-4 A	80	152706	30 x 5	4	6.500	12.000	BO KS 30	20	84
KS 50-4 A	80	152768	50 x 5	4	4.000	8.000	BO KS 50	20	260

Reduces setup times significantly. Discs can be changed without removing the arbor from the collet mounted in the machine.

Arbor for overlap slotted discs



Order No.	EAN 4007220	S x L [mm]	Thread		g
BO KS 30	152164	6 x 40	1/8 BSW	1	11
BO KS 50	152157	6 x 40	1/4-28 UNF	1	16

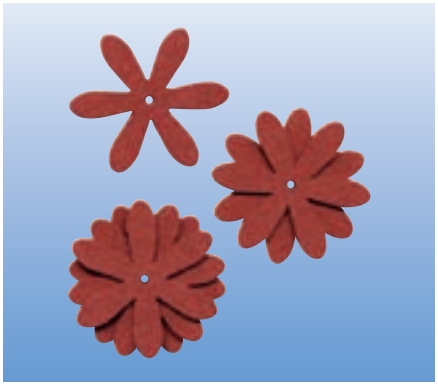
Flexible tools for work on the inner surfaces of bores and pipes.

Advantages

- High flexibility.
- Perfect for grinding internal surfaces of small-diameter bores or pipes.
- Their small sizes makes these tools particularly suitable for the 7-40 mm diameter range.

Recommendations for use

POLISTAR tools perform best at the recommended peripheral speed of 15-20 m/s.
POLISTAR pads can be stacked in several layers. To benefit from a maximum abrasive surface area, ensure that the lobes of the individual star pads are aligned offset.
PST 20/1,6 for center hole ø 7-15 mm
PST 30/1,6 for center hole ø 10-20 mm
PST 40/3 for center hole ø 15-25 mm
PST 50/3 for center hole ø 20-40 mm



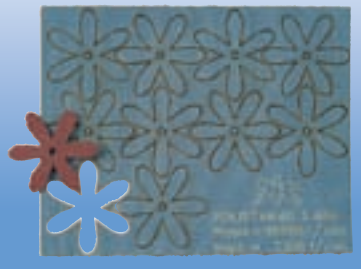
Ordering note

Please order the arbor separatly.
POLISTAR are delivered in sheet form.
Sheet contents:
ø 20 and 30 mm = 25 pcs.
ø 40 and 50 mm = 10 pcs.

Safety note

For safety reasons, it is imperative to remain within the specified RPM limit at all times.

POLISTAR



Application examples:

- Cleaning, fine grinding and ultrafine finishing of bores.
- Post-weld removal of metal discolorations in stainless steel pipes.
- Inlet and outlet radiusing of bores/holes.
- Light deburring work on bores (removal of secondary burrs) in preparation of coating.
- Deburring in cross-bores.

Ordering example:
EAN 4007220**661345**
PST 20/1,6 A 60

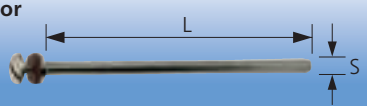
How to order:

PST	= POLISTAR
20	= Dia. D [mm]
1,6	= Centre hole dia. H [mm]
A	= Aluminium oxide A
60	= Grit size
	Please state required grit size.

Order No.	Grit size			Dia. D [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable arbor		
	60	80	120							g
	EAN 4007220									
PST 20/1,6 A	661345	661444	661451	20	1,6	15.000	38.000	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100	90
PST 30/1,6 A	661468	661482	661512	30	1,6	9.500	25.000	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100	160
PST 40/3,0 A	661543	661550	661567	40	3,0	7.200	19.000	BO 6-3 1-6	100	250
PST 50/3,0 A	661574	661581	661598	50	3,0	5.700	15.000	BO 6-3 1-6	100	310

Arbors

Arbor



Reduces setup times significantly. Pads can be changed without removing the arbor from the collet mounted in the machine.

Order No.	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole [mm]		g
BO 2,3/1,6 1-5	151570	2,34 x 43	1-5	1,6	10	20
BO 3/1,6 1-5	151587	3 x 43	1-5	1,6	10	34
BO 6/3 1-6	505694	6 x 40	1-6	3	1	38

Grinding tools for work on metal and non-metal workpieces are divided onto three groups:

1. **Bonded abrasives**
   (e.g. grinding discs)

2. **Coated abrasives**
   (e.g. belts, discs and foils)
   These tools are used for coarse, fine and finest grinding and for stock removal.

3. **Non-woven abrasives**
   This group is characterised trough its ability to produce special high-quality finishes.

Non-woven abrasives consist of polyamide fibres, synthetic resins and abrasive grit. The non-woven fibre structure is impregnated with resin and permeanted with abrasive grit. The extremely loose connections between the individual fibres to one another gives high flexibility and a spring type effect to the non-woven material. Its elastical properties allows it to form to the given contour, thus producing a very special surface structure. This silk-matt grinding result is unique and cannot be produced with any other grinding materials. The even distribution of the abrasive grit within the non-woven mixture guarantees a supply of fresh and sharp abrasive grit during the entire grinding operation.

Although non-woven abrasives are constructed in a complete different way to coated abrasives, the same highly-abrasive grit is used:

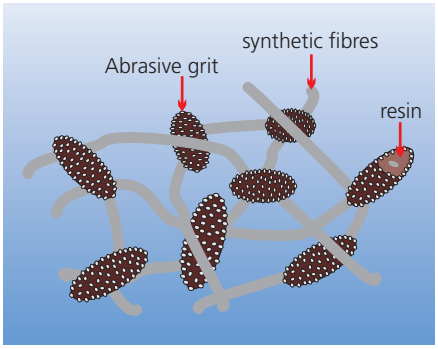
- Aluminium oxide (Al_2O_3) is very durable, achieves maximum tool life and is highly abrasive on hardened steel. The surface produced is characterised by its enhanced gloss. When working on aluminium, discolouration is prevented.
- Silicon carbide (SiC) is even sharper, harder and cuts easier. Within a very short time, it can produce a finer, long-lasting and slightly matt grinding pattern on many material surfaces.

The choice of abrasive grit size for conventional bonded grit or non-woven bonded grit is dependent on the specific application. For non-woven abrasives, the designation is made according to the following system:

Designation	**Comparable to PFERD Grit size (Mesh)**
Very coarse	50- 80
Coarse	80-100
Medium	120-180
Fine	220-280
Very fine	320-400

Application

Non-woven abrasives are used when other tools reach their finishing limits or cannot achieve the required result.



The low aggressive characteristics of the polyamide fibres and the positive effect of the abrasive non-woven materials create brilliant smooth finished surfaces.

Non-woven abrasives are waterproof, can be rinsed out and are very resistant. They do not clog up, leave no rust on surfaces and do not conduct.

Non-woven abrasives can be used for deburring, cleaning and are excellent for surface work on many metals, including aluminium, brass, copper, nickel, stainless steel (INOX) and titanium.

Non-woven abrasives are also suitable for work on materials which are hard to grind such as ceramic, glass and plastic. Non-woven abrasives can be used for wet or dry grinding.

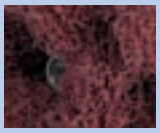
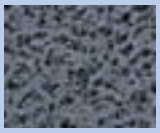
Non-woven tools

Non-woven abrasives are suitable for the manufacture of a range of very different tools such as hand pads, grinding drums, discs, belts and wheels.
The grinding qualities of these different tools are designed for a wide variety of uses. They provide solutions for metal processing and further processing needs.
PFERD provides:

- Discs: COMBIDISC® non-woven discs VRW, POLIVLIES® discs
- Manual applications: non-woven belt rolls, POLIVLIES® hand pad
- POLINOX® mounted points, grinding wheels and grinding drums (PNL, PNZ, PNR, PNG, PNST and PNER).

Further types
Non-woven abrasives can also be produced with fabric reinforcement. This non-woven abrasive is far stronger and more abrasive. Non-woven abrasives with fabric reinforcement are suitable for the production of discs and non-woven belts.
PFERD provides:

- Discs: COMBIDISC® non-woven discs VRH, POLIVLIES® self-adhesive discs
- Discs: POLIVLIES® flap discs
- Belts: short belts, non-woven type

PNL		Made of multiple radially arranged layers of non-woven abrasive material. Dense packing of the layers ensures a long service life. These tools are used chiefly for surface conditioning.
PNZ		The non-woven abrasive material is in multiple, radially arranged layers. Between each layer variation is a coated abrasive flap. This layer variation allows increased stock removal and produces a coarser surface finish.
PNR		The non-woven abrasive material is arranged in multiple radiating layers. Since the individual layers are not interconnected, the layers adopt to the different workpiece contours (e.g. grinding profiles or pipes).
PNG		Made of several strips of corrugated non-woven material, wrapped around a common core. The wavy structure of the non-woven grinding fabric permits depolishing and matt finishing of surfaces without visible transitions.
PNST		Layers of non-woven material on top of one another forming a star-shape and connected in the middle. Excellent for use in confined spaces, e.g. inside bores and recesses, and in hard-to-reach areas.
PNER		Various combinations of compressed materials, fibres, grain and the appropriate bond offer a wide range of surface finishing options from relatively coarse grinding through to preparation for polishing.

POLINOX® mounted points and ring wheels comprise a non-woven nylon in which the grit is embedded. The flexible open-cell structure of the non-woven material gives very elastic, cool grinding properties.
Due to the flexibility of the non-woven fleece, the tool will not alter the surface geometry of the workpiece in any way. Different surface textures and roughness levels can be obtained by selecting from a range of grit sizes and tool designs.

Advantages

- Cool grinding.
- A comprehensive programme in terms of dimensions, grit sizes and types.
- No clogging.

Application examples

- Producing matt and satin finishes on metals.
- Cleaning of oxidized non-ferrous metals.
- Brush matting on stainless steel (INOX) without visible transions.
- Roughing of plastics in preparation for adhesives.
- Surface preparation of welds.

Recommendations for use

- POLINOX® mounted points and wheels perform best at a recommended cutting speed of 10-20 m/s. This results in an ideal compromise between stock removal, high-quality finish, thermal load on the work-piece and tool wear.
- Flexible shafts, electric and air-power grinders are used as tool drives.
  Please refer to catalogue 209 for detailed information and order data regarding tool drives.

Safety notes

- The maximum approved peripheral speed is 32 m/s.
- For safety reasons, it is imperative to remain within the stated RPM limit.

Safety recommendations

= Wear eye protection!

= Wear hearing protection!

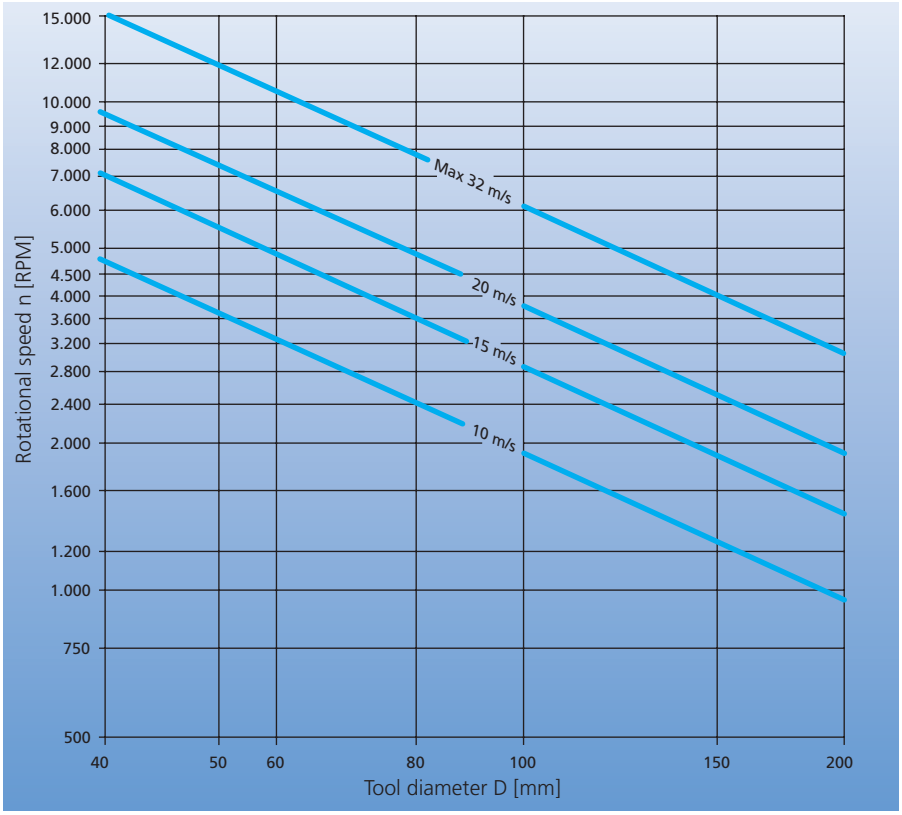
= Wear a respirator!

= Read the instructions!

Cutting speed POLINOX® mounted points and wheels

In this diagram, the cutting speeds are represented using blue diagonal lines. The vertical line representing the tool dia. meets the given cutting speed (diagonals). From its point of intersection proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] of the POLINOX® Mounted points, machine and wheels.

Example
PNL 6050/6 A 100
Cutting speed: 15 m/s
Speed range: 4.750 RPM



Made of multiple elements of non-woven abrasive material, arranged radially. Dense packing of the layers ensures a long service life.

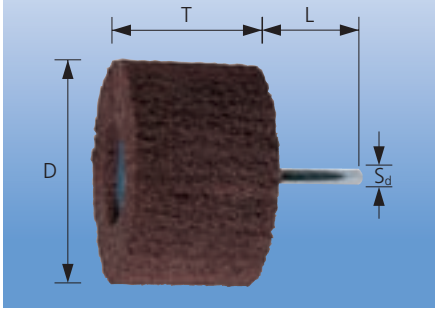
These tools are used chiefly for surface conditioning.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**157060**
PNL 4020/6 A 100

How to order:
PNL = POLINOX® mounted point
4020 = Dia D x width T [mm]
6 = Shank dia. S_d [mm]
A = Aluminium oxide A
100 = Grit size
Please state required grit size.

POLINOX® mounted points PNL Aluminium oxide



Order No.	Grit size			D x T [mm]	S_d x L mm	Recom. speed [RPM]	Max. speed [RPM]		g
	100	180	280						
	EAN 4007220								
PNL 4020/6 A	157060	157077	157084	40 x 20	6 x 40	7.500	15.000	10	270
PNL 5030/6 A	157107	157114	157121	50 x 30	6 x 40	6.000	12.000	10	392
PNL 6050/6 A	157213	157220	157237	60 x 50	6 x 40	5.000	10.000	10	880
PNL 8050/6 A	157183	157190	157206	80 x 50	6 x 40	4.000	7.500	10	1.560

The non-woven material is arranged in multiple radial layers.

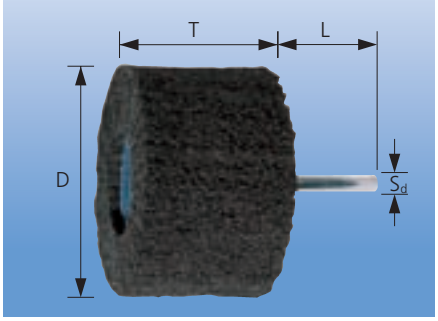
These tools are used chiefly for surface conditioning.

Abrasive: Silicon carbide (SiC)

Ordering example:
EAN 4007220**293669**
PNL 4020/6 SiC 180

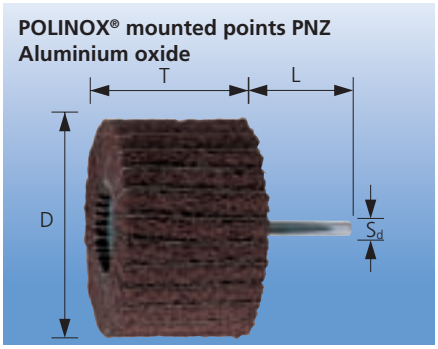
How to order:
PNL = POLINOX® mounted point
4020 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]
SiC = Silicon carbide SiC
180 = Grit size
Please state required grit size.

POLINOX® mounted points PNL-SiC



Order No.	Grit size			D x T [mm]	S_d x L mm	Recom. speed [RPM]	Max. speed [RPM]		g
	100	180	280						
	EAN 4007220								
PNL 4020/6 SiC	803455	293669	293676	40 x 20	6 x 40	7.500	15.000	10	270
PNL 5030/6 SiC	803493	293683	293690	50 x 30	6 x 40	6.000	12.000	10	392
PNL 6050/6 SiC	803509	293706	293713	60 x 50	6 x 40	5.000	10.000	10	880
PNL 8050/6 SiC	803516	293720	293737	80 x 50	6 x 40	4.000	7.500	10	1.560

POLINOX® mounted points PNZ
Aluminium oxide



The non-woven abrasive flaps are arranged radially with abrasive cloth interlayers.

This structure permits an improved stock removal and produces a coarser finish.

Abrasive: Aluminium oxide A

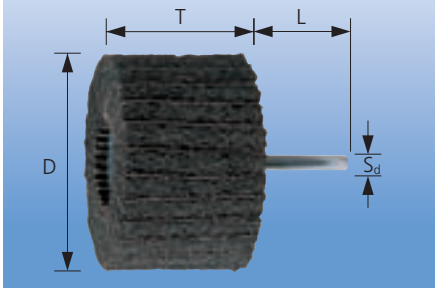
Ordering example:
EAN 4007220**157053**
PNZ 4020/6 A 100

How to order:

PNZ	= POLINOX® mounted point
4020	= Dia. D x width T [mm]
6	= Shank dia. S_d [mm]
A	= Aluminium oxide A
100	= Grit size
	Please state required grit size.

Order No.	Grit size		D x T [mm]	S_d x L mm	Recom. speed [RPM]	Max. speed [RPM]		
	100	180						
	EAN 4007220							
PNZ 4020/6 A	157053	294697	40 x 20	6 x 40	7.500	15.000	10	300
PNZ 5030/6 A	803158	803165	50 x 30	6 x 40	6.000	12.000	10	520
PNZ 6050/6 A	157138	294703	60 x 50	6 x 40	5.000	10.000	10	980
PNZ 8050/6 A	157176	294710	80 x 50	6 x 40	4.000	7.500	10	1.730
PNZ 10050/6 A	294666	294673	100 x 50	6 x 40	3.000	6.000	5	2.710

POLINOX® mounted points PNZ-SiC



The non-woven abrasive flaps are arranged radially with abrasive cloth interlayers.

This structure permits an improved stock removal and produces a coarser finish.

Abrasive: Silicium carbide (SiC)

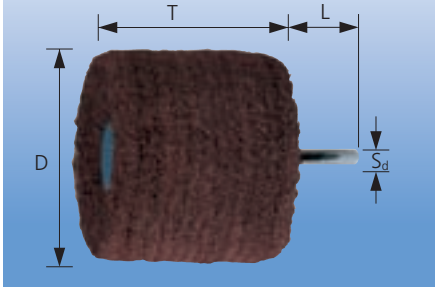
Ordering example:
EAN 4007220**617571**
PNZ 8050/6 SiC 100

How to order:

PNZ	= POLINOX® mounted point
8050	= D x T [mm]
6	= Shank dia. S_d [mm]
SiC	= Silicon carbide
100	= Grit size
	Please state required grit size.

Order No.	Grit size		D x T [mm]	S_d x L mm	Recom. speed [RPM]	Max. speed [RPM]		
	100	180						
	EAN 4007220							
PNZ 8050/6 SiC	617571	617588	80 x 50	6 x 40	4.000	7.500	10	1.360

POLINOX® mounted points PNR
Aluminium oxide



The non-woven abrasive is arranged in multiple axial layers.

Since the individual layers are not interconnected, the abrasive surface adapts easily to different workpiece contours (e.g. in grinding sections or pipes).

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**157145**
PNR 6050/6 A 100

How to order:

PNR	= POLINOX® mounted point
6050	= Dia. D x width T [mm]
6	= Shank dia. S_d [mm]
A	= Aluminium oxide A
100	= Grit size
	Please state required grit size.

Order No.	Grit size			D x T [mm]	S_d x L mm	Recom. speed [RPM]	Max. speed [RPM]		
	100	180	280						
	EAN 4007220								
PNR 6050/6 A	157145	157152	157169	60 x 50	6 x 40	5.000	10.000	10	780
PNR 8050/6 A	157244	157251	157268	80 x 50	6 x 40	4.000	7.500	10	1.380

Made of several strips of corrugated non-woven material, wrapped around a common core.

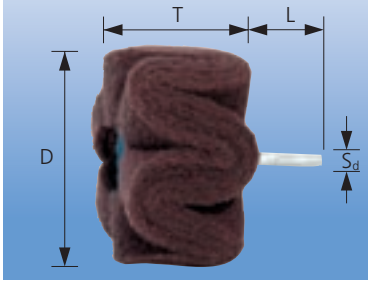
The wavy structure of the non-woven fabric permits depolishing and matt finishing of surfaces without visible transitions.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**499580**
PNG 10050/6 A 100

How to order:
PNG = POLINOX® mounted point
10050 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]
A = Aluminium oxide A
100 = Grit size
Please state required grit size.

POLINOX® mounted points PNG Aluminium oxide



Order No.	Grit size			D x T [mm]	S_d x L mm	Recom. speed [RPM]	Max. speed [RPM]		
	100	180	280						g
	EAN 4007220								
PNG 8050/6 A	737989	737996	738009	80 x 50	6 x 40	4.000	7.500	10	2.660
PNG 10050/6 A	499580	499597	499603	100 x 50	6 x 40	3.000	6.000	5	1.330

Consists of several strips of corrugated non-woven material wrapped around a common core.

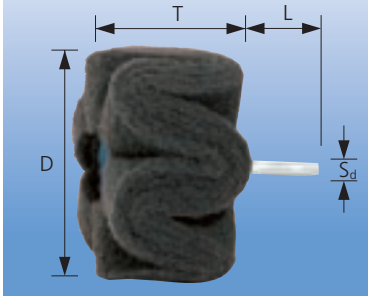
The wavy structure of the abrasive material permits depolishing and matt finishing of surfaces without visible transitions.

Abrasive: Silicon carbide (SiC)

Ordering example:
EAN 4007220**617595**
PNG 10050/6 SiC 100

How to order:
PNG = POLINOX® mounted point
10050 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]
SiC = Silicon carbide SiC
100 = Grit size
Please state required grit size.

POLINOX® mounted points PNG-SiC



Order No.	Grit size			D x T [mm]	S_d x L mm	Recom. speed [RPM]	Max. speed [RPM]		
	100	180	280						g
	EAN 4007220								
PNG 8050/6 SiC	738016	738023	803639	80 x 50	6 x 40	4.000	7.500	10	2.660
PNG 10050/6 SiC	617595	617601	803646	100 x 50	6 x 40	3.000	6.000	5	1.330

Tool Sets
Tool Sets with Drives

High-power output electric grinder in set with PFERD tools for cleaning, brush matting, fine grinding of small and medium surfaces, in particular on stainless steel (INOX).

Insulated motor, integrated overload protection, user-friendly, robust construction. Stepless electronic speed regulations within the 4.000 to 9.000 RPM speed range.

Please refer to catalogue 209 for detailed information regarding power sources and order data.

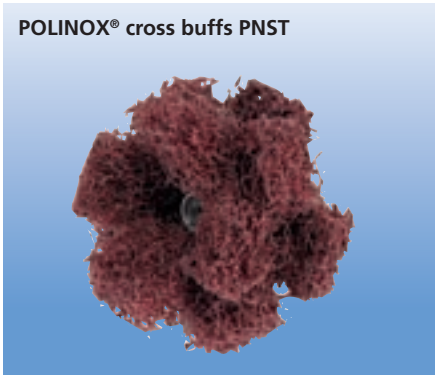
Contents:
- 1 electric grinder UGER 5/90 SI
- 2 fan grinders
- 10 POLINOX® mounted points of various types and grit sizes

Recommendation for use:
The result of surface work on stainless steel (INOX) depends on different factors:
It depends on the interaction of:
- Tools (abrasive grit size and type),
- cutting speed,
- grinding pressure,
- processing time and
- stainless steel quality being processed.

POLINOX® set

Order No.	EAN 4007220		g
SET PNL/Z/R 6050 UGER 5/90 230 V	323274	1	6.720

POLINOX® cross buffs PNST



Suitable for cleaning, deburring and fine grinding of inner surfaces and contours. Particularly suitable for narrow places such as bores and cavities and hard-to-reach places.

Available in two different dimensions and two grit sizes.

Application examples:
- Deburring of bores on non-ferrous metals.
- Fine grinding on the inner surfaces of pipes made of stainless steel (INOX).
- Cleaning thread pitches.

Recommendation for use:
Recommended cutting speed:
10-20 m/s.

Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**441138**
PNST 25-2 A 36 Medium

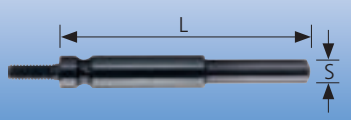
How to order:

PNST	= POLINOX® cross buffs
25	= Dia. [mm]
2	= No. of layers
A	= Aluminium oxide A
medium	= Grit size Please state required grit size.

Order No.	Grit size		Dia. D [mm]	No. of layers	Recom. speed [RPM]	Max. speed [RPM]	Suitable arbor		
	medium	very fine							g
	EAN 4007220								
PNST 25-2 A	441138	441145	25	2	10.000	19.100	BO PNST 6-125, BO PNST 6-75	20	160
PNST 38-3 A	441152	441169	38	3	7.500	12.600	BO PNST 6-125, BO PNST 6-75	20	230

Arbors

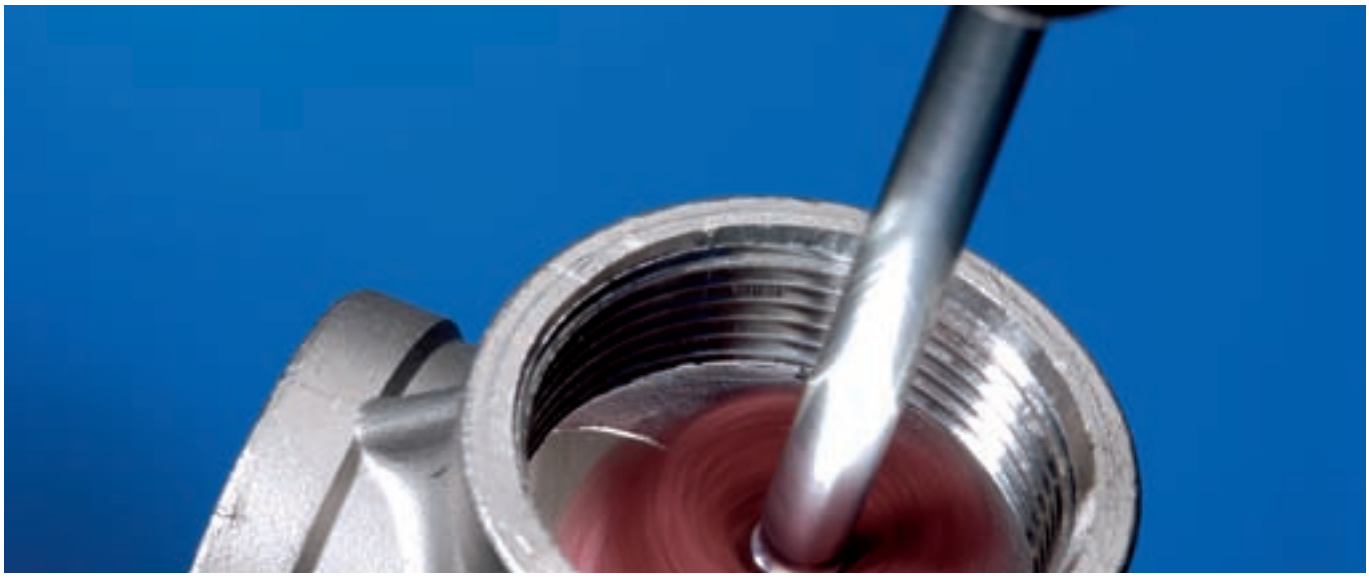
Arbors for POLINOX® cross buffs



Arbor for POLINOX® cross buffs. The arbors are of different lengths, thus allowing bores or cut-outs of different depths to be reached.

Explanation of the code system:
S = Shank diameter [mm]
L = Shank length [mm]

Order No.	EAN 4007220	S x L [mm]	Thread	Mounting length [mm]		g
BO PNST 6-75	440988	6 x 75	8-32 UNC	30	1	25
BO PNST 6-125	440995	6 x 125	8-32 UNC	30	1	40



Made of radially arranged flaps of non-woven abrasive material.

Used mainly for work on large surfaces.

Abrasive: Aluminium oxide A

Ordering note:
Please order arbors separately.

Ordering example:
EAN 4007220**479667**
PNL 15050 A 100

How to order:
PNL = POLINOX® ring wheel
15050 = Dia. D x width T [mm]
A = Aluminium Oxide A
100 = Grit size
Please state required grit size.

POLINOX® ring wheels PNL
Aluminium oxide

Order No.	Grit size			D x T [mm]	Cent. hole dia. H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable matching arbors		g
	100	180	280							
	EAN 4007220									
PNL 15050 A	479667	479674	479681	150 x 50	25,4	2.000	4.000	FR/VR 12/25,4	1	580
PNL 20050 A	479698	479704	479711	200 x 50	44,0	1.500	3.000	FR/VR 12/44,0	1	935

The non-woven abrasive is arranged in multiple radial flaps with abrasive cloth interlayers. This structure permits an improved stock removal and produces a coarser finish.

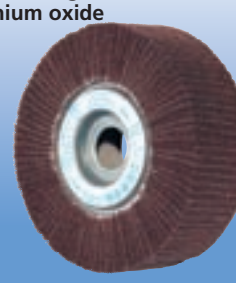
Abrasive: Aluminium oxide A

Ordering note:
Please order arbors separately.

Ordering example:
EAN 4007220**479728**
PNZ 15050 A 100

How to order:
PNZ = POLINOX® ring wheel
15050 = Dia. D x width T [mm]
A =Aluminium oxide A
100 = Grit size
Please state required grit size.

POLINOX® ring wheels PNZ
Aluminium oxide



Order No.	Grit size		D x T [mm]	Cent. hole dia. H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable matching arbors		g
	100	180							
	EAN 4007220								
PNZ 15050 A	479728	479735	150 x 50	25,4	2.000	4.000	FR/VR 12/25,4	1	720
PNZ 20050 A	479759	479766	200 x 50	44,0	1.500	3.000	FR/VR 12/44,0	1	935

Made of several strips of corrugated non-woven material, wrapped around a common core.

The wavy structure of the non-woven fabric permits depolishing and matt finishing of surfaces without visible transitions.

Abrasive: Aluminium oxide A

Ordering note:
Please order arbors separately.

Ordering example:
EAN 4007220**479780**
PNG 15050 A 100

How to order:
PNG = POLINOX® ring wheel
15050 = Dia. D x width T [mm]
A = Aluminium oxide
100 = Grit size
Please state required grit size.

POLINOX® ring wheels PNG
Aluminium oxide

Order No.	Grit size			D x T [mm]	Cent. hole dia. H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable matching arbors		g
	100	180	280							
	EAN 4007220									
PNG 15050 A	479780	479797	479803	150 x 50	25,4	2.000	4.000	FR/VR 12/25,4	1	565
PNG 20050 A	479810	479827	479834	200 x 50	44,0	1.500	3.000	FR/VR 12/44,0	1	865

POLINOX® ring wheels PNR
Aluminium oxide

Strips of non-woven abrasive material are arranged around a metal core in slightly wavy layers.

The open structure and high flexibility of the non-woven material permits for excellent following of contours. Suitable for blending and matt finishing of surfaces without visible transitions.

Abrasive: Aluminium oxide A

Ordering note:
Please order arbors separately.

Ordering example:
EAN 4007220**293546**
PNR 10035 A 180

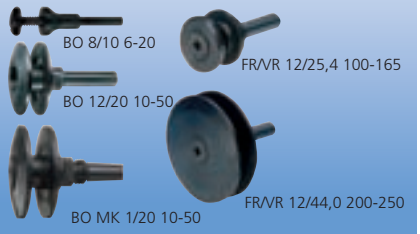
How to order:

PNR	= POLINOX® ring wheel
10035	= Dia. D x width T [mm]
A	= Aluminium oxide
180	= Grit size Please state required grit size.

Order No.	Grit size		D x T [mm]	Cent. hole dia. H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable matching arbors		g
	180	280							
	EAN 4007220								
PNR 10035 A	293546	293560	100 x 35	10,0	2.500	5.500	BO 8/10 6-20	1	125
PNR 15040 A	293577	293584	150 x 40	20,0	2.000	4.000	BO 12/20 10-50, BO MK 1/20 10-50	1	350

Arbors

Arbors



Reusable arbors for mounting POLINOX® ring wheels.

The clamping flanges are accommodated in the tool recess. This design facilitates face grinding near edges and corners.

Order No.	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole [mm]		g
FR/VR 12/25,4 100-165	479643	12 x 40	25-50	25,4	1	199
FR/VR 12/44,0 200-250	479650	12 x 40	25-50	44,0	1	538
BO 8/10 6-20	297667	8 x 30	6-20	10	1	88
BO 12/20 10-50	297674	12 x 35	10-50	20	1	360
BO MK 1/20 10-50	297681	-	10-50	20	1	370

POLINOX® foamed ring wheels PNER consist of multiple layer, strongly compressed non-woven material, bonded in a special grit resin system. This special bonding system produces non-woven tools with excellent surface finishes, high stock removal and long tool life. Provide medium flexibility when working on soft metals, alloys, high-alloy steels and titanium alloys.

Recommendations for use

- POLINOX® PNER foamed ring wheels perform best at the recommended peripheral speed of 15-30 m/s, where the optimum balance between stock removal, surface finishing quality, workpiece temperature loads and tool wear is achieved.
- We recommend the use of substantially reduced peripheral speeds on poorly heat-conducting materials (titanium, stainless steels).
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.

Safety note

- For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Available in four different grades and two abrasive types:

soft (W)	maximum flexibility.	Very good for contour grinding
medium-soft (MW)	semi-flexible type.	Especially suited for contour grinding
medium hard (MH)	medium flexibility	Good stock removal and edgeholding
hard (H)	low flexibility.	Very good stock removal, edgeholding

Abrasive:
A = Aluminium oxide
C = Silicon carbide (SiC)

Ordering note:
Foamed ring wheels with 150 mm dia. come with an adapter for reducing the bore from 25,4 to 20 mm. The adapter is included with each tool. Arbors must be ordered separately.

Ordering example:
EAN 4007220**440438**
PNER-H 2525 A coarse

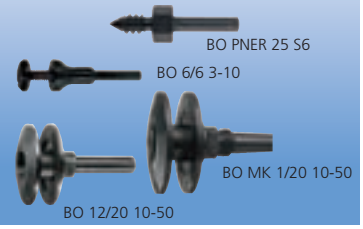
How to order:

PNER	= POLINOX® foamed ring wheel
H	= Fleece density hard
2525	= Dia. D x width T [mm]
A	= Aluminium oxide A
G	= Grit size Please state required grit size.

POLINOX® foamed ring wheels PNER

Order No.	Grit size		Type	D x T [mm]	Cent. hole dia. H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable matching arbors		
	coarse	fine								g
	EAN 4007220									
PNER-W 7506 A	476307	355619	soft	75 x 6	6	6.400	10.200	BO 6/6 3-10	5	80
PNER-W 7506 C	-	355626	soft	75 x 6	6	6.400	10.200	BO 6/6 3-10	5	67
PNER-W 7513 A	476314	476321	soft	75 x 13	6	6.400	10.200	BO 6/6 3-10	5	155
PNER-W 7513 C	-	476338	soft	75 x 13	6	6.400	10.200	BO 6/6 3-10	5	175
PNER-W 15025 C	-	355633	soft	150 x 25	25,4/20	3.200	5.100	BO 12/20 10-50	1	188
PNER-MW 7506 A	-	355534	medium-soft	75 x 6	6	6.400	10.200	BO 6/6 3-10	5	84
PNER-MW 7506 C	-	355558	medium-soft	75 x 6	6	6.400	10.200	BO 6/6 3-10	5	82
PNER-MW 7513 A	-	355565	medium-soft	75 x 13	6	6.400	10.200	BO 6/6 3-10	5	181
PNER-MW 7513 C	-	355589	medium-soft	75 x 13	6	6.400	10.200	BO 6/6 3-10	5	163
PNER-MW 15025 A	-	476291	medium-soft	150 x 25	25,4/20	3.200	5.100	BO 12/20 10-50	1	163
PNER-MW 15025 C	-	355602	medium-soft	150 x 25	25,4/20	3.200	5.100	BO 12/20 10-50	1	247
PNER-MH 2525 A	-	440452	medium-hard	25 x 25	6	19.000	30.500	BO PNER 25 S6	10	130
PNER-MH 7506 A	-	355503	medium-hard	75 x 6	6	6.400	10.200	BO 6/6 3-10	5	103
PNER-MH 7513 A	-	355510	medium-hard	75 x 13	6	6.400	10.200	BO 6/6 3-10	5	220
PNER-MH 15025 A	-	355527	medium-hard	150 x 25	25,4/20	3.200	5.100	BO 12/20 10-50	1	271
PNER-H 2525 A	440438	440445	hard	25 x 25	6	19.000	30.500	BO PNER 25 S6	10	130
PNER-H 5003 A	-	505700	hard	50 x 3	6	9.500	15.300	BO 6/6 3-10	10	200
PNER-H 7503 A	-	505717	hard	75 x 3	6	6.400	10.200	BO 6/6 3-10	10	250
PNER-H 7506 A	355473	-	hard	75 x 6	6	6.400	10.200	BO 6/6 3-10	5	123
PNER-H 7513 A	355480	-	hard	75 x 13	6	6.400	10.200	BO 6/6 3-10	5	253
PNER-H 15025 A	355497	-	hard	150 x 25	25,4/20	3.200	5.100	BO 12/20 10-50	1	332

Arbors for POLINOX® foamed ring wheels



Re-usable arbor for POLINOX® foamed ring wheels.

Order No.	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole [mm]		g
BO PNER 25 S6	440469	6 x 25	-	6	1	22
BO 6/6 3-10	297650	6 x 25	3-10	6	1	38
BO 12/20 10-50	297674	12 x 35	10-50	20	1	360
BO MK 1/20 10-50	297681	-	10-50	20	1	370

POLINOX® Grinding Drums

POLINOX® grinding drums PNL-W

Made of radially arranged flaps of non-woven abrasive material.

Especially suitable for work on large surfaces.

Abrasive: Aluminium oxide A

Recommendation for use:
Please refer to catalogue 209 for the appropriate tool drives.

Ordering note:
Centre hole ø 19 mm with 4 wedge keyways, suitable for all drum tool drives.

For further drum tools, please refer to pages 65 and 102 in this catalogue and catalogue 208.

Ordering example:
EAN 4007220**593523**
PNL-W 100100 A 100

How to order:
PNL-W = POLINOX® grinding drums
100100 = Dia. D x width T [mm]
A = Aluminium oxide A
100 = Grit size
Please state required grit size.

Order No.	Grit size			D x T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
	100	180	280						
	EAN 4007220								
PNL-W 100100 A	593523	593530	593547	100 x 100	19	2.000 - 3.700	5.000	1	472

POLINOX® grinding drums PNZ-W

The non-woven abrasive is arranged in multiple radial flaps with abrasive cloth interlayers. This structure permits an improved stock removal and produces a coarser finish.

Abrasive: Aluminium oxide A

Recommendation for use:
Please refer to catalogue 209 for the appropriate tool drives.

Ordering note:
Centre hole ø 19 mm with 4 wedge keyways, suitable for all drum tool drives.

For further drum tools, please refer to pages 65 and 102 in this catalogue and in catalogue 208.

Ordering example:
EAN 4007220**593554**
PNZ-W 100100 A coarse/60

How to order:
PNZ-W = POLINOX® grinding drums
100100 = Dia. D x width T [mm]
A = Aluminium oxide A
coarse/60 = Grit size
Please state required grit size.

Order No.	Grit size			D x T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
	coarse/60	medium/80	fine/120						
	EAN 4007220								
PNZ-W 100100 A	593554	593561	593578	100 x 100	19	2.000 - 3.700	5.000	1	552

For flexible peripheral grinding of difficult workpiece contours.

Application examples
- Deburring of ribs and deep fins.
- Cleaning of cylinder heads.
- Fine-grinding on radiator-type heat exchangers.

Recommendation for use:
Up to three discs can be stacked to achieve an optimum tool width.

Recommended cutting speed:
10-25 m/s.

Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**505847**
PVR 15008-13 A medium

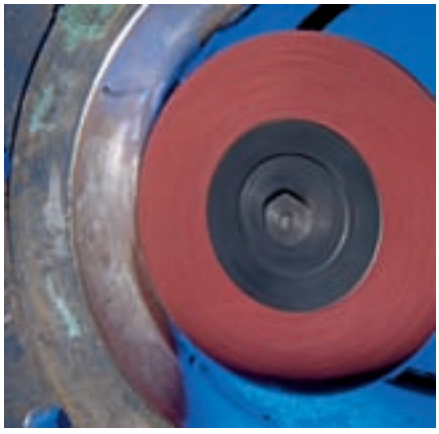
How to order:

PVR	= POLIVLIES® discs
15008	= Dia. D x width T [mm]
13	= Centre hole dia. H [mm]
A	= Aluminium oxide A
medium	= Grit size Please state required grit size.

POLIVLIES® discs

Order No.	Grit size		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable matching arbors		
	medium	very fine							
	EAN 4007220								
PVR 15008-13 A	505847	505861	150 x 8	13	1.300 - 3.100	4.000	PVR 6/13 1-25	10	130

Arbors



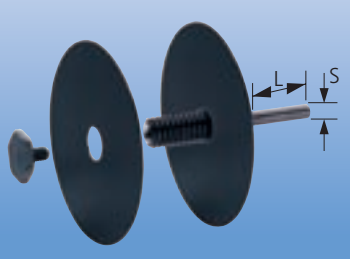
Arbor for POLIVLIES® discs.

Recommendation for use:
The clamping depth is preset via a hexagonal nut on the shank side. Up to three POLIVLIES® discs can be mounted on one arbor.

Supplied with one pair of metal discs (50 and 80 mm dia.) for lateral flexibility adjustment.

The tool can be changed from the front by slackening the mounting screw. The arbor need not be removed from the machine to replace the tool.

Arbors for POLIVLIES® discs



Order No.	EAN 4007220	S x L [mm]	Suitable for centre hole [mm]	Clamping width [mm]		
PVR 6/13 1-25	505878	6 x 35	13	1-25	1	20

POLIVLIES® flap discs

Suitable for surface grinding on stainless steel components.

Application examples
- Fine-grinding of large surfaces.
- Removal of heat discoloration.
- Weld cleaning and light dressing work on stainless steel assemblies.
- Post-assembly finishing work in process equipment and tank fabrication.

Abrasive: Aluminium oxide A
Available grit sizes:
Coarse = yellowish-brown
Medium = red-brown
Fine = blue

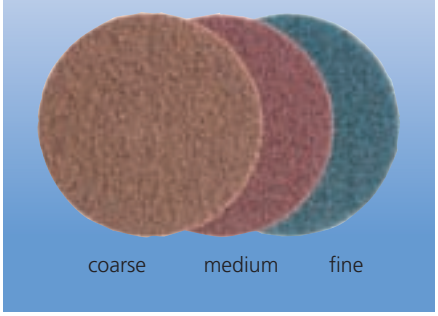
Recommendation for use:
On variable-speed angle grinders, POLIVLIES® flap discs produce the best results at the recommended peripheral speed of 30-35 m/s.

Ordering example:
EAN 4007220**748343**
PVL 115 A medium

How to order:
PVL = POLIVLIES® flap disc
115 = Dia. D [mm]
A = Aluminium oxide A
medium = Grit size
Please state required grit size.

Order No.	Grit size			Dia. D [mm]	Width [mm]	Cent. hole dia. H [mm]	Recom. speed [RPM]	Max. speed [RPM]		
	coarse	medium	fine							g
	EAN 4007220									
PVL 115 A	748336	748343	748350	115	18	22,23	5.000 - 5.800	13.300	5	350
PVL 125 A	748367	748374	748381	125	18	22,23	4.600 - 5.300	12.200	5	475

POLIVLIES® self-adhesive discs



For use in finishing large surface areas. PFERD offers these tools in three diameters, each available in three grit sizes.

Application examples
- Removal of discolorations from stainless steel surfaces.
- Fine-grinding of large components in process equipment and tank construction.

Recommendation for use:
Use with POLIVLIES® self-adhesive disc holder PVKRH. POLIVLIES® self-adhesive discs perform best at the recommended peripheral speed of 15-20 m/s. An optimum compromise between stock removal, surface quality, workpiece thermal load and tool wear is achieved at this speed.

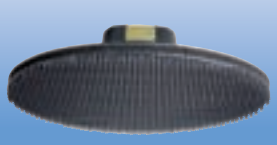
Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**354230**
PVKR 115 A coarse

How to order:
PVKR = POLIVLIES® self-adhesive disc
115 = Dia. D_1 [mm]
A = Aluminium oxide A
coarse = Grit size
Please state required grit size.

Order No.	Grit size			D_1 [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable arbor		
	coarse	medium	fine						g
	EAN 4007220								
PVKR 115 A	354230	297469	354254	115	3.300	5.300	PVKRH 115	10	245
PVKR 125 A	354261	297452	354278	125	3.000	4.850	PVKRH 125	10	287
PVKR 178 A	354285	354292	354308	178	2.200	3.500	PVKRH 178	10	436

POLIVLIES® self-adhesive disc holders



The elastic interlayer of the POLIVLIES® self-adhesive disc holder permits surface finishing without visible transitions, in addition to rapid tool changes.

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Order No.	EAN 4007220	Dia. D [mm]	Thread H	Max. speed [RPM]		g
PVKRH 115	316962	115	M 14	5.300	1	60
PVKRH 125	316979	125	M 14	4.850	1	70
PVKRH 178	354223	178	M 14	3.500	1	117

Special tools for marbling surfaces.

Non-woven abrasive in aluminium oxide type, water and oil-resistant quality.

Recommendation for use:
The discs must be used with the matching marbling tool.

Ordering example:
EAN 4007220**156964**
MKRK 40 A 100

How to order:
MKRK = Abrasive disc for use with marbling tool
40 = Dia. D_1 [mm]
A = Aluminium oxide A
100 = Grit size
Please state required grit size.

Discs for marbling tools

Order No.	Grit size			D_1 [mm]	Recom. speed [RPM]	Suitable arbor		
	100	180	280					g
	EAN 4007220							
MKRK 40 A	156964	156971	156988	40	600 - 1.400	MK 6/40/6	100	238
MKRK 50 A	156995	157008	157015	50	600 - 1.400	MK 6/50/6	100	328
MKRK 60 A	157022	157039	157046	60	600 - 1.400	MK 6/60/6	100	355

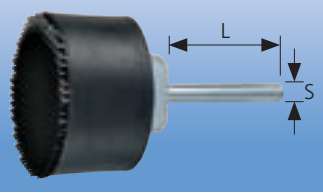
The marbling tool serves to hold the non-woven marbling disc.

A highly elastic intermediate layer carries the velco fastening system.

Ordering example:
EAN 4007220**156933**
MK 6/40/6

How to order:
MK 6 = Marbling tool
40 = Dia. D [mm]
6 = Shank dia. mm

Marbling tools



Order No.	EAN 4007220	Dia. D [mm]	S x L [mm]	Max. speed [RPM]	Suitable tool		g
MK 6/40/6	156933	40	6 x 40	4.700	MKRK 40	1	35
MK 6/50/6	156940	50	6 x 40	3.800	MKRK 50	1	45
MK 6/60/6	156957	60	6 x 40	3.200	MKRK 60	1	50

Other Non-Woven Tools

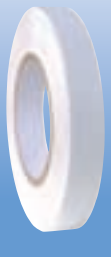
This self-adhesive masking tape is designed to preserve the clear separation between different surface finishes in adjacent areas, e.g. near mitred joints.
Masking tape is applied to protect areas not to be machined.

Advantages
- High elasticity and tear strength.
- Pulls off cleanly.
- Exceptional edge stability.
- Leaves no undesirable oily stains on workpieces.

Application examples
- Clear-cut separation of surface areas requiring different abrasive finish patterns.
- Protection of previously finished surfaces.

Recommendation for use:
- Use masking tape for surface protection only when finish machining with soft, flexible tools (e.g. non-woven tools).
- To avoid inadvertent removal, take care to apply load to masking tape only in the direction of tool rotation when grinding.

Masking tape



Order No.	EAN 4007220	Width x length T x L [mm]	g	
ADB 20	726372	20 x 25.000	280	1

POLICLEAN® is a coarse-structured non-woven abrasive material made of a special combination of synthetic fibres and abrasive grain. PFERD offers POLICLEAN® tools in several types and versions:

- POLICLEAN® wheels
- POLICLEAN® mounted tools
- COMBIDISC®-POLICLEAN® discs (refer to COMBIDISC® tools, page 26)
- POLICLEAN® discs

Advantages

- The flexible structure adapts ideally to the surface contours and shape of the workpiece.
- Open-cell material prevents loading and gives cool grinding properties.
- POLICLEAN® tools leave no corrosive residue on the workpiece surface.

Application examples

- Removal of rust, corrosion stains, scale, dirt, stubborn paint or adhesive residue, old coatings or residue of seals or gaskets.
- Cleaning of weld seams, removal of slight drawing marks and heat discolorations, especially on stainless steel.
- Surface roughening in preparation of adhesive bonding or application of fillers.
- Cleaning of surfaces of diverse characteristics.

Recommendations for use

POLICLEAN® tools perform best at a recommended peripheral speed of 15-20 m/s, where the optimum balance between stock removal, surface finishing quality, workpiece temperature loads and tool wear is achieved.

Safety note

For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Safety recommendations

= Wear eye protection!

= Wear hearing protection!

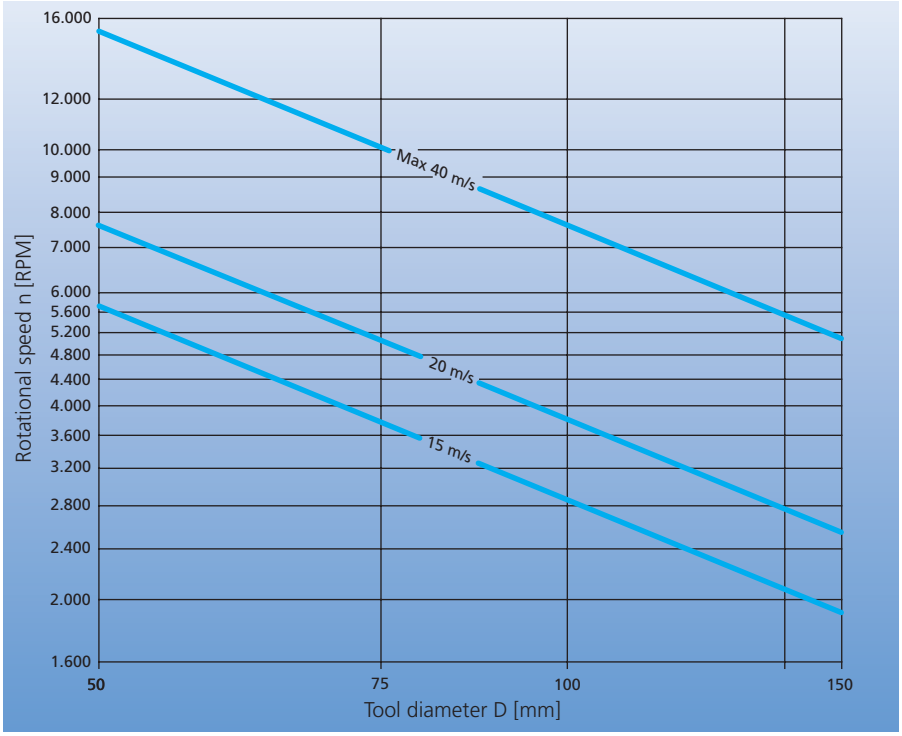
= Wear a respirator!

= Read the instructions!

Cutting speed POLICLEAN® tools

In this diagram, the cutting speeds are represented using blue diagonal lines. The vertical line representing the tool dia. meets the given cutting speed (diagonals). From its point of intersection proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] of the POLICLEAN® tools and machine.

Example
PCLS 7513/6
Cutting speed: 15-20 m/s
Speed range: 3.800-5.000 RPM



For general-purpose peripheral grinding applications.

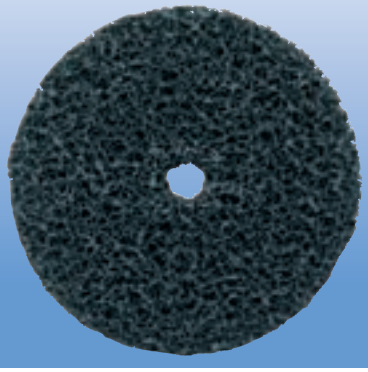
Recommendation for use:
Flexible shafts, electric and air-power grinders can be used as tool drives.

Ordering note:
Please order arbor as a separately.

Ordering example:
EAN 4007220**471470**
PCLS 7513/6

How to order:
PCLS = POLICLEAN® wheels
75 = Dia. D [mm]
13 = Width T [mm]
6 = Centre hole dia. H [mm]

POLICLEAN® wheels



Order No.	EAN 4007220	Dia. D [mm]	T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable matching arbors		g
PCLS 5013/6	471463	50	13	6	6.000 - 7.600	15.000	PCLB 6/6/13, PCLB 6/6/26, PCLB 6/6/39	6	102
PCLS 7513/6	471470	75	13	6	4.000 - 5.100	10.000	PCLB 6/6/13, PCLB 6/6/26, PCLB 6/6/39	6	156
PCLS 10013/13	471487	100	13	13	3.000 - 3.800	7.500	PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26	4	208
PCLS 15013/13	471494	150	13	13	2.000 - 2.500	5.100	PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26	4	512

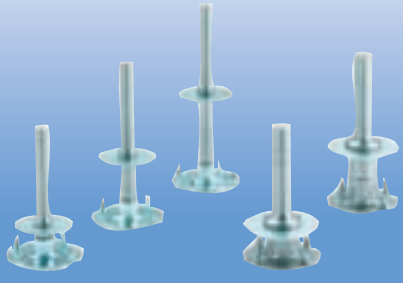
Arbors

Mounting system for POLICLEAN® wheels, with wheel stacking possibility.

The use of this arbor reduces set-up times significantly. Discs can be changed without removing the shank from the machine collet.

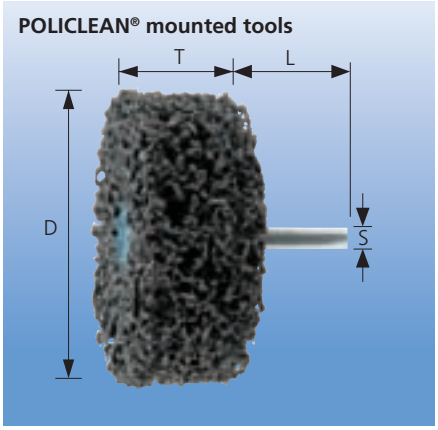
PFERD offers three arbors for clamping one, two or three wheels, respectively.

Arbors for POLICLEAN® discs



Order No.	EAN 4007220	S x L [mm]	Suitable for centre hole [mm]	Packaging	Suitable tool		g
PCLB 6/6/13	471562	6 x 40	6	1 disc	PCLS 5013/6, PCLS 7513/6	1	29
PCLB 6/6/26	471579	6 x 40	6	2 discs	PCLS 5013/6, PCLS 7513/6	1	33
PCLB 6/6/39	471586	6 x 40	6	3 discs	PCLS 5013/6, PCLS 7513/6	1	36
PCLB 6/13/13	532928	6 x 40	13	1 disc	PCLS 10013/13, PCLS 15013/13	1	59
PCLB 6/13/26	532935	6 x 40	13	2 discs	PCLS 10013/13, PCLS 15013/13	1	74
PCLB 8/13/13	471593	6 x 40	13	1 disc	PCLS 10013/13, PCLS 15013/13	1	59
PCLB 8/13/26	471609	6 x 40	13	2 discs	PCLS 10013/13, PCLS 15013/13	1	74

POLICLEAN® mounted tools



POLICLEAN® mounted tools are used for general-purpose peripheral grinding.

Recommendation for use:
Flexible shafts, electric and air-power grinders can be used as tool drives.

Ordering example:
EAN 4007220**661369**
PCLZY 5026/6

How to order:
PCLZY = POLICLEAN® mounted tool
5026 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]

Order No.	EAN 4007220	D x T [mm]	S_d x L mm	Recom. speed [RPM]	Max. speed [RPM]		g
PCLZY 5013/6	661321	50 x 13	6 x 40	6.000 - 7.000	15.000	5	220
PCLZY 5026/6	661369	50 x 26	6 x 40	6.000 - 7.000	15.000	5	320
PCLZY 7513/6	661376	75 x 13	6 x 40	4.000 - 5.100	10.000	5	300
PCLZY 7526/6	661383	75 x 26	6 x 40	4.000 - 5.100	10.000	5	430
PCLZY 10013/6	661406	100 x 13	6 x 40	3.000 - 3.800	7.500	5	400

POLICLEAN® discs

The non-woven cleaning fabric is supported by a backing pad. This design allows POLICLEAN® discs to be used very effective in face grinding.

Recommendation for use:
Preferably for use on slow-running angle grinders.

Recommended peripheral speed: 30-35 m/s.

Ordering example:
EAN 4007220**515297**
PCLD 125-13

How to order:
PCLD = POLICLEAN® discs
125 = Dia. D [mm]
13 = Width T [mm]

Order No.	EAN 4007220	Dia. D [mm]	T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
PCLD 115-13	515280	115	13	22,23	5.000 - 7.000	10.000	5	432
PCLD 125-13	515297	125	13	22,23	5.000 - 7.000	10.000	5	477

PFERD manufactures Poliflex® fine grinding tools with exact shape accuracy, superb consistency of quality and narrow dimensional tolerances. They are perfect for fine grinding, structuring and preparing for polishing work. PFERD provides a comprehensive range of Poliflex® fine mounted points and wheels. Using a large selection of abrasives, grit sizes and hardness grades, the fine grinding tools are produced in various different shapes, adapted to each application.

Advantages

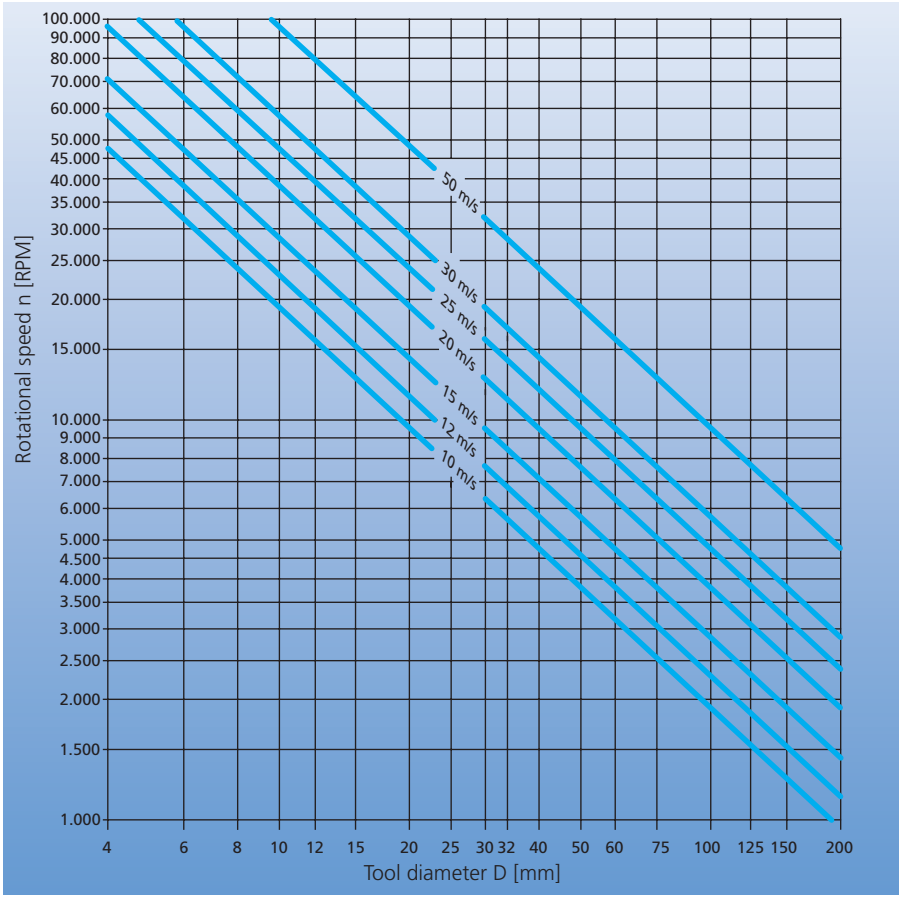
- Poliflex® fine grinding tools achieve a high-quality workpiece finish.
- The accurate concentricity of the Poliflex® fine mounted points
  - proves safety for the user,
  - reduces the load on the power tool,
  - minimizes operating vibrations,
  - prevents chatter marks,
  - reduces wear.

- Poliflex® fine mounted points can easily be profiled according to their application purpose using an abrasive diamond or a ceramic trimming stone at low speeds. Please refer to catalogue 203 for detailed information and order data regarding dressing tools.
- Specially-adapted bonds, grit sizes and hardness grades are available for each application.

Cutting speed for Poliflex® fine grinding tools

In this diagram, the cutting speeds are represented using blue diagonal lines. The vertical line representing the tool dia. meets the given cutting speed (diagonals). From its point of intersection proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] of the mounted points and machine.

Example
PF KU 15 6 AR 120 GR
Dia.: 15 mm
Cutting speed: 15 m/s
Speed range: 19.000 RPM



To facilitate the selection of the optimum Poliflex® fine grinding point, we have defined preselection into the material groups, main applications and special application requirements. The overview shows which variations of abrasive and bond are recommended for the various materials taking into account the respective application.

How do I find the best Poliflex® fine mounted point?

❶ Material
Normally the workpiece material is known. Please observe the colour code for the material group given in the table.

❷ Application/ processing case
The application must then be selected based on the type of material.
The following differentiation is made here:
- General use,
- surface use and
- edge applications.

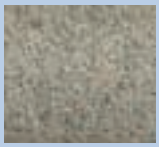
❶ Material groups ▼			❷ Application/ processing case ▼	Bond ▶ / Abrasive (mixed grits) ▶ / ❹ Designation/Fine grinding point bond ▶ / Recommended cutting speed ▶ / ❸ Surface finish ▼
Steel, cast steel	Non-hardened, non-heat treated steels up to 1.200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steels	**Use on surfaces**	Matt surface
				Shiny surface
			Edge application with high form stability	Matt surface
				Shiny surface
	Hardened, heat-treated steels exceeding 1.200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steels	**Use on surfaces**	Matt surface
				Shiny surface
			Edge application with high form stability	Matt surface
				Shiny surface
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	**Use on surfaces**	Matt surface
				Shiny surface
			Edge application with high form stability	Matt surface
				Shiny surface
			General use	Structured surface
Non-ferrous metals	Soft non-ferrous metals	Alu-alloys, brass, copper, zinc	**Use on surfaces**	Matt surface
				Shiny surface
			Edge application with high form stability	Matt surface
				Shiny surface
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, hard aluminium alloys (high Si content)	**Use on surfaces**	Matt surface
				Shiny surface
			Edge application with high form stability	Matt surface
				Shiny surface
	High-temperature resistant materials	Nickel based alloys, cobalt based alloys (aircraft engine and turbine construction)	**Use on surfaces**	Matt surface
				Shiny surface
			Edge application with high form stability	Matt surface
				Shiny surface
● = highly suitable	❍ = suitable			❺ Catalogue page ▶

❸ Desired surface finish
Then the desired work result needs to be selected.
The following differentiation is made here:
- Matt surface,
- shiny surface and
- structured surface.

It is necessary to differentiate the selection criteria into material, application and surface finish to find the optimum mounted point and correct bond. The mounted point bond and grain mix have a direct effect on the grinding output, tool life and aggresiveness of the tools. They also determine the appearance of the surface that is to be worked on.

❹ Fine mounted point bond
After the application and the required surface have been determined, the suitable bond can be selected in the right-hand part of the overview. The "highly suitable" bond is shown with a black dot (•).

❺ Optimum Poliflex® fine mounted point
For more information about the selected bond, the mounted point shapes/ dimensions and grit sizes, please refer to the following pages of this catalogue. Please note the page references in line ❺ of this table.

Polyurethane bond			Elastomer bond				Resinod bond
CN			AR	ANCN	AW	AWCN	AN
							
PUR Soft (W)	PUR Medium hard (MH)	PUR STRUC	GR	GHR	LR	LHR	TX
10-12 m/s	10-15 m/s	5-10 m/s	10-12 m/s	20-25 m/s	15-20 m/s	30-40 m/s	20-25 m/s
❍	●		❍				
			●		❍		
	❍		❍				●
				●		❍	
❍	●		❍				
			❍		●		
	❍						●
				❍		●	
●	❍						
			●		❍		
	❍						●
				●	❍		
❍	❍	●					
●	❍						❍
			❍		●		
				❍			●
			❍		●		
	❍						●
			❍	●			
				❍			●
				❍		●	
	❍						●
			●	❍			
	❍			❍			●
				❍		●	
89-90	89-90	101-102	93-95	93	96-97	96-97	98-100

Safety recommendations

For safety reasons, it is imperative to remain within the stated RPM limit at all times.

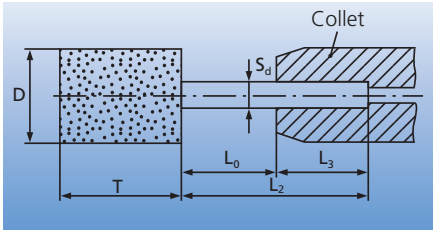
= Wear eye protection!

= Read the instructions!

Poliflex® fine-grinding tools are designed for the following maximum peripheral speeds:

PUR	**= 15 m/s**	**PUR-STRUC**	**= 15 m/s**
GR	**= 15 m/s**	**GHR**	**= 30 m/s**
LR	**= 25 m/s**	**LHR**	**= 50 m/s**
TX	**= 30 m/s**		

Maximum RPM levels for the various shank lengths and shank diameters are defined in EN 69170. The calculation procedures are described in the EN 12413. These limits must be strictly observed to prevent shank buckling during use.
Regardless of the shank length, the clamping depth (L_3) in the machine collet must be at least 10 mm.
The buckling speed calculated according to EN 12413 depends on the following factors:
- Shape and dimensions of the mounted point,
- diameter of the steel shank and
- free shank length L_0.



D = Outer dia. of the mounted point
T = Mounted point width
S_d = Shank diameter
L_0 = Open shank length
L_2 = Shank length
L_3 = Clamping length of the shank

Each pack of PFERD mounted points comes with RPM recommendations for a given unsupported shank length (L_0) of that product. Check each tool for proper concentricity and correct clamping in the power unit before commencing work.

Tables stating approved maximum RPM levels for the entire range of Poliflex® fine grinding points can be made available upon request.

How to order

Order example
Poliflex® fine mounted points

PF	ZY	20306	AR	120	GR
❶	❷	❸	❹	❺	❻	❼

Order example
Poliflex® fine grinding wheels

PF	SC	40106	AR	120	GR
❶	❷	❸	❹	❺	❻	❼

❶ Designation
PF = code for Poliflex®

❷ Shapes

SC	Wheel	
ZY	Cylindrical	
WR	Cylindrical with radius end	
KU	Ball	
SP	Tree	
KE	Tapered	

❸ Dimensions
Poliflex® fine grinding points
Outer dia. D x width T [mm]
20 mm x 30 mm = 2030

Poliflex® fine grinding wheels
Outer dia. D x width T [mm]
40 mm x 10 mm = 4010

❹ Mounting system data
Poliflex® fine grinding points
Shank dia. S_d x shank length L_2 [mm]
3 mm x 30 mm
6 mm x 40 mm
8 mm x 40 mm

Poliflex® marbling tools
Female thread M 8

Poliflex® fine grinding wheels
The boring diameters are as follows depending on the wheel diameter
Ø 2, 3, 6, 10 or 20 mm

❺ Abrasive Grit
As a rule, two types of abrasives with internationally defined designations according to ISO 525 are used:
A = Aluminium oxide (Al_2O_3)
C = Silicon carbide (SiC)
The following are used to more clearly identify the grit mixes above and beyond ISO 525:

AW	= Aluminium oxide, white
AR	= Aluminium oxide, pink
AN	= Aluminium oxide, regular
CN	= Silicon carbide, green
CU	= Silicon carbide, grey
AWCN	= Mixture of AW + CN
ANCN	= Mixture of AN + CN

❻ Grit sizes
Grit sizes are specified according to ISO 525 and EN 8486. The grit sizes of PFERD fine grinding points depend upon the shape and diameter of the point.

❼ Bonds
The following bonds are available:

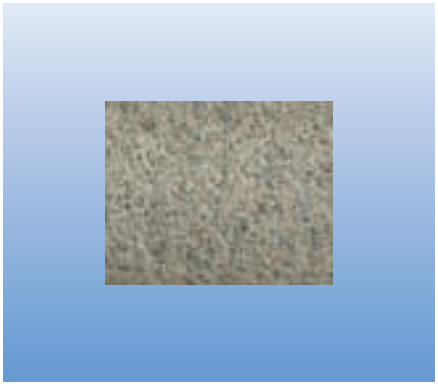
PUR	= Polyurethane (soft, medium hard)
PU-STRUC	= Polyurethane
GR	= Rubber
GHR	= Rubber hard
LR	= Leather
LHR	= Leather hard
TX	= Textile

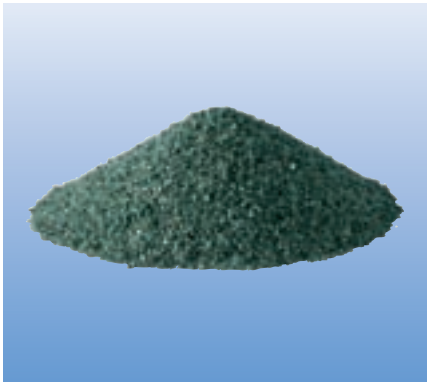
Products made to order

Grinding points can be made to order according to your specific requirements.

Customer support

Our experienced sales consultants and customer support engineers will be glad to assist with any specific grinding problem you may have. Just call us!





Poliflex® fine grinding tools are made of PUR-bonded green silicon carbide (SiC). The very soft PUR bond is available in two hardness grades (PUR-W, PUR-MH).

Abrasive grain is homogeneously distributed in the PUR structure. The open-cell surface and elastic properties of the bond ensure a good adaptability to workpiece contours and a soft, cool grinding action.

Advantages

- The PUR bond is ideal for use on steel component surfaces, stainless steel (INOX), titanium, light and non-ferrous metals, and is characterised by a fine, matt grinding pattern.
- The soft bond and special SiC grit shape guarantee very soft grinding properties.
- The stock removal rate can be varied via the selection of the hardness grade.

Application examples

- Fine grinding of press and forging tools.
- Fine grinding of welds on stainless steel (INOX) constructions.
- Pre-grinding in preparation of polishing on foodstuff processing and kitchen equipment.

Recommendations for use

- Poliflex® fine grinding points in PUR bond perform best on surfaces at the recommended cutting speed of 10-15 m/s.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.

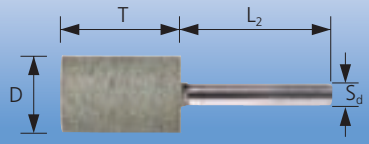
Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**535288**
PF ZY 3232/6 CN **80** PUR-MH

How to order:

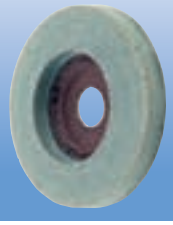
PF	= Poliflex®
ZY	= Shape cylindrical
3232	= Dia. D x width T [mm]
6	= Shank dia. S_d [mm]
CN	= Silicon carbide SiC
80	= Grit size
	Please state required grit size.
PUR-MH	= Bond

Poliflex® fine grinding points ZY PUR



Order No.	Grit size			D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		
	80	150	220						
	EAN 4007220								
Shank ø 3 mm									
PF ZY 0812/3 CN . . . PUR-W	535004	535028	-	8 x 12	3 x 30	24.000	35.800	10	40
Shank ø 6 mm									
PF ZY 1025/6 CN . . . PUR-W	535042	535073	-	10 x 25	6 x 40	19.000	28.600	10	170
PF ZY 1530/6 CN . . . PUR-W	535141	535165	-	15 x 30	6 x 40	12.500	19.000	10	240
PF ZY 2030/6 CN . . . PUR-W	535233	535257	-	20 x 30	6 x 40	9.500	14.300	10	340
PF ZY 2530/6 CN . . . PUR-W	297841	297865	-	25 x 30	6 x 40	7.500	11.400	10	260
Shank ø 3 mm									
PF ZY 0812/3 CN . . . PUR-MH	-	535011	535035	8 x 12	3 x 30	24.000	35.800	10	40
Shank ø 6 mm									
PF ZY 1025/6 CN . . . PUR-MH	-	535059	535080	10 x 25	6 x 40	19.000	28.600	10	170
PF ZY 1530/6 CN . . . PUR-MH	535134	535158	535172	15 x 30	6 x 40	12.500	19.000	10	240
PF ZY 2030/6 CN . . . PUR-MH	535325	535240	-	20 x 30	6 x 40	9.500	14.300	10	340
PF ZY 3232/6 CN . . . PUR-MH	535288	535295	-	32 x 32	6 x 40	6.000	8.900	5	185

Poliflex® discs PFD PUR



Poliflex® discs are suitable for work on larger surfaces in face grinding.

Preferably used on slow-running angle grinders.

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**536346**
PFD 115-22 CN **60** PUR-MH

How to order:

PFD	= Poliflex® disc
115	= Dia. D [mm]
22	= Centre hole dia. H [mm]
CN	= Silicon carbide SiC
60	= Grit size Please state required grit size.
PUR-MH	= Bond

Order No.	Grit size		Dia. D [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]		
	60	150						
	EAN 4007220							
PFD 115-22 CN . . . PUR-W	536377	536391	115	22,23	2.400	5.300	5	800
PFD 115-22 CN . . . PUR-MH	536346	536360	115	22,23	2.400	5.300	5	800

Poliflex® fine grinding wheels SC PUR

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**144749**
PF SC 7510/10 CN **80** PUR-W

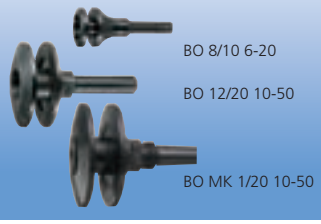
How to order:

PF	= Poliflex®
SC	= Form wheel
7510	= Dia. D x width T [mm]
10	= Centre hole dia. H [mm]
CN	= Silicon carbide SiC
80	= Grit size Please state required grit size.
PUR-W	= Bond

Order No.	Grit size		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable arbor		
	80	150							
	EAN 4007220								
PF SC 7510/10 CN . . . PUR-W	144749	-	75 x 10	10	2.500	3.800	BO 8/10 6-20	5	353
PF SC 12520/20 CN . . . PUR-W	144794	-	125 x 20	20	1.500	2.300	BO 12/20 10-50, BO MK 1/20 10-50	1	600
PF SC 15025/20 CN . . . PUR-W	298428	298435	150 x 25	20	1.200	1.900	BO 12/20 10-50, BO MK 1/20 10-50	1	1.080

Arbors

Arbors



Re-usable arbors for Poliflex® fine grinding wheels, PUR bond.

Explanation of the code system:
S = Shank diameter [mm]
L = Shank length [mm]

Order No.	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole [mm]		
BO 8/10 6-20	297667	8 x 30	6-20	10	1	88
BO 12/20 10-50	297674	12 x 35	10-50	20	1	360
BO MK 1/20 10-50	297681	-	10-50	20	1	370

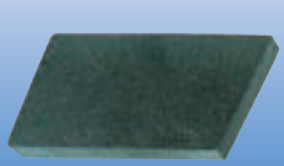
Due to their rhomboid shape, these pads permit convenient grinding in hard-to-reach areas such as fillets or corners.

They can be reduced in side or cut into any desired shape with a cut-off wheel to meet specific application needs.

Ordering example:
EAN 4007220**298688**
PFB 1156030 CU **120** PUR

How to order:
PFB = Poliflex® block
1156030 = Lenght L x width B x height C [mm]
CU = Silicon carbide SiC
120 = Grit size
Please state required grit size.
PUR = Bond

Poliflex® blocks, PUR



Order No.	Grit size			Dimensions L x B x C [mm]		
	60	120	240			
	EAN 4007220					
PFB 1156030 CU . . . PUR	298671	298688	298695	115 x 60 x 30	5	1.720

Poliflex® blocks in a sales-promoting display box.

Total contents:
9 pcs., 3 Poliflex® Blocks each in
- Grit 60 coarse
- Grit 120 medium
- Grit 240 fine

Poliflex® block set

Order No.	EAN 4007220	Dimension [mm]		
PSO 11560	298886	285 x 150 x 60	1	3.100

Special tools for producing marbled surface effects. The unmounted tool has an M 8 female thread.
A reusable arbor is needed for mounting this tool.

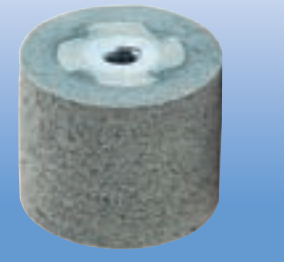
Recommendation for use:
Only use for face grinding at 1.000-4.000 RPM.

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**146194**
PF ZY 5040 M 8 CN **30** PUR

How to order:
PF = Poliflex®
ZY = Cylindrical
5040 = Dia. D x width T [mm]
M 8 = Thread H
CN = Silicon carbide SiC
30 = Grit size
Please state required grit size.
PUR = Bond

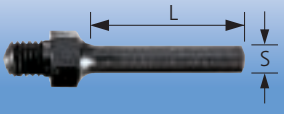
Poliflex® marbling tools



Order No.	Grit size		D x T [mm]	H	Recom. speed [RPM]	Max. speed [RPM]	Suitable arbor		
	30	80							
	EAN 4007220								
PFZY 5040 M 8 CN . . . PUR	146194	146200	50 x 40	M 8	1.000 - 4.000	5.700	BO 6/8	5	540

The arbor BO 6/8 (shank dia. 6 mm) is suitable for use with Poliflex® marbling tools.

Arbor



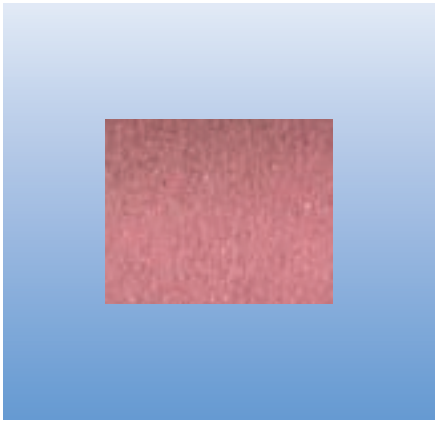
Order No.	EAN 4007220	S x L [mm]	Thread		
BO 6/8	062104	6 x 40	M 8	1	20

GR bond

Poliflex® fine grinding tools in GR bond are manufactured using pink aluminium oxide. The GR bond is a softer elastomer-based bond.

Advantages of the GR bond

- The GR bond is ideal for **surface** grinding on steels (including stainless grades) and non-ferrous metals. It provides a characteristically fine, **shiny** finish.
- The soft and elastic bond ensures a soft, fine grinding action.

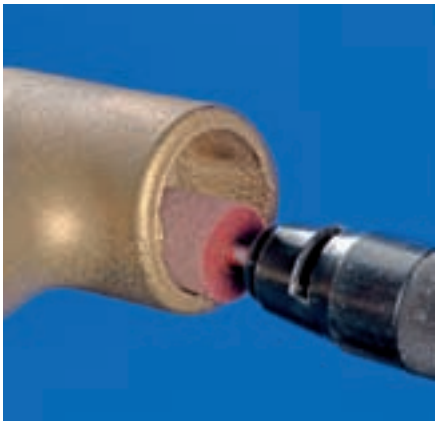


GHR bond

Poliflex® fine grinding tools in GHR bond are produced from a mix consisting of regular aluminium oxide and green silicon carbide (SiC). GHR is also a rather soft, but durable elastomer-based bond.

Advantages of the GHR bond

- Our GHR bond is ideal for **edge** grinding on non-hardened steels and stainless steels. It produces a fine, shiny finish.
- On high-temperature alloys, titanium or titanium alloys, these tools create a **shiny** surface appearance.



Application examples

- Fine grinding of edges and transitions on tools for plastic injection parts.
- Fine grinding of press dies.
- Fine grinding of turbine blades.
- Creation of a fine surface finish on valves and fittings.

Recommendations for use

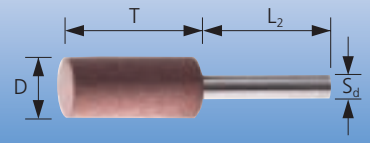
- Poliflex® fine-grinding points in GR bond perform best on surfaces at a recommended cutting speed of 10-12 m/s.
- Poliflex® fine-grinding points in GHR bond perform best on edges at a recommended cutting speed of 20-25 m/s.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders. Please refer to catalogue 209 for detailed information and order data.

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering note:
Poliflex® fine grinding points with grit size 400 are produced with abrasive AW = white aluminium oxide.

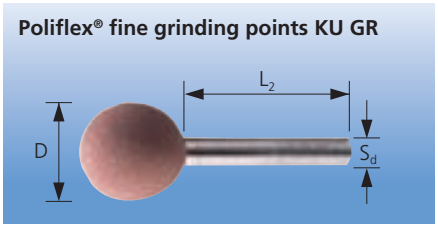
Ordering example:
EAN 4007220**534113**
PF ZY 2030/6 AR **80** GR
Please state required grit size.

Poliflex® fine grinding points ZY GR/GHR



Order No.	Grit size					D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
	46	80	120	220	400						
	EAN 4007220										
Shank ø 3 mm											
PF ZY 0408/3 AR . . . GR	-	-	144800	-	-	4 x 8	3 x 30	47.500	71.600	10	22
PF ZY 0610/3 AR . . . GR	-	-	144824	-	-	6 x 10	3 x 30	32.000	47.700	10	29
PF ZY 0808/3 AR . . . GR	-	-	144848	144855	-	8 x 8	3 x 30	24.000	35.800	10	33
PF ZY 0812/3 AR . . . GR	-	-	144886	144893	-	8 x 12	3 x 30	24.000	35.800	10	37
PF ZY 1006/3 AR . . . GR	-	-	145838	-	-	10 x 6	3 x 30	19.000	28.600	10	37
PF ZY 1010/3 AR . . . GR	-	-	144947	144954	-	10 x 10	3 x 30	19.000	28.600	10	43
PF ZY 1015/3 AR . . . GR	-	-	145036	145043	-	10 x 15	3 x 30	19.000	28.600	10	55
PF ZY 1208/3 AR . . . GR	-	-	145883	-	-	12 x 8	3 x 30	16.000	23.800	10	50
PF ZY 1212/3 AR . . . GR	-	-	145203	-	-	12 x 12	3 x 30	16.000	23.800	10	57
PF ZY 1220/3 AR . . . GR	-	-	145265	-	-	12 x 20	3 x 30	16.000	23.800	10	79
Shank ø 6 mm											
PF ZY 1010/6 AR . . . GR	-	-	144992	-	-	10 x 10	6 x 40	19.000	28.600	10	120
PF ZY 1015/6 AR . . . GR	-	-	145081	145098	-	10 x 15	6 x 40	19.000	28.600	10	130
PF ZY 1025/6 AR . . . GR	-	533925	145128	145135	-	10 x 25	6 x 40	19.000	28.600	10	150
PF ZY 1208/6 AR . . . GR	-	-	145913	-	-	12 x 8	6 x 40	16.000	23.800	10	117
PF ZY 1212/6 AR . . . GR	-	-	145234	-	-	12 x 12	6 x 40	16.000	23.800	10	134
PF ZY 1220/6 AR . . . GR	-	-	145296	145302	-	12 x 20	6 x 40	16.000	23.800	10	155
PF ZY 1515/6 AR . . . GR	-	-	145371	-	-	15 x 15	6 x 40	12.500	19.000	10	177
PF ZY 1525/6 AR . . . GR	-	-	145418	145425	-	15 x 25	6 x 40	12.500	19.000	10	220
PF ZY 1530/6 AR . . . GR	534007	-	145470	145487	-	15 x 30	6 x 40	12.500	19.000	10	240
PF ZY 2012/6 AR . . . GR	-	-	145982	-	-	20 x 12	6 x 40	9.500	14.300	10	200
PF ZY 2020/6 AR . . . GR	-	-	145562	145579	-	20 x 20	6 x 40	9.500	14.300	10	265
PF ZY 2030/6 AR . . . GR	-	534113	145630	-	-	20 x 30	6 x 40	9.500	14.300	10	340
PF ZY 2515/6 AR . . . GR	-	-	146026	-	-	25 x 15	6 x 40	7.500	14.300	10	290
PF ZY 2525/6 AR . . . GR	-	-	145708	145715	-	25 x 25	6 x 40	7.500	11.400	10	390
PF ZY 3020/6 AR . . . GR	-	-	146057	-	-	30 x 20	6 x 40	6.500	9.500	5	225
PF ZY 3030/6 AR . . . GR	-	-	145760	-	-	30 x 30	6 x 40	6.500	9.500	5	310
Shank ø 8 mm											
PF ZY 4025/8 AR . . . GR	-	-	146095	-	-	40 x 25	8 x 40	4.500	9.500	5	495
Shank ø 3 mm											
PF ZY 0408/3 AW . . . GHR	-	-	-	-	533734	4 x 8	3 x 30	100.000	143.200	10	22
PF ZY 0808/3 ANCN . . . GHR	-	-	533741	-	-	8 x 8	3 x 30	60.000	71.600	10	33
PF ZY 0812/3 ANCN . . . GHR	-	-	533765	-	-	8 x 12	3 x 30	60.000	71.600	10	37
PF ZY 0812/3 AW . . . GHR	-	-	-	-	533772	8 x 12	3 x 30	60.000	71.600	10	37
PF ZY 1010/3 ANCN . . . GHR	-	-	533871	-	-	10 x 10	3 x 30	45.000	57.200	10	43
PF ZY 1015/3 ANCN . . . GHR	-	-	533895	-	-	10 x 15	3 x 30	45.000	52.000	10	55
Shank ø 6 mm											
PF ZY 1015/6 ANCN . . . GHR	-	-	533901	-	-	10 x 15	6 x 40	45.000	57.200	10	130
PF ZY 1025/6 ANCN . . . GHR	145197	-	533956	-	-	10 x 25	6 x 40	45.000	57.200	10	150
PF ZY 1025/6 AW . . . GHR	-	-	-	-	533970	10 x 25	6 x 40	45.000	57.200	10	150
PF ZY 1220/6 ANCN . . . GHR	145364	-	-	-	-	12 x 20	6 x 40	40.000	47.700	10	155
PF ZY 1530/6 ANCN . . . GHR	145555	534069	-	-	-	15 x 30	6 x 40	32.000	47.700	10	240
PF ZY 2030/6 ANCN . . . GHR	145692	-	-	-	-	20 x 30	6 x 40	24.000	28.600	10	340
PF ZY 2525/6 ANCN . . . GHR	145753	-	-	-	-	25 x 25	6 x 40	19.000	22.900	10	390

Poliflex® fine grinding points KU GR



Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

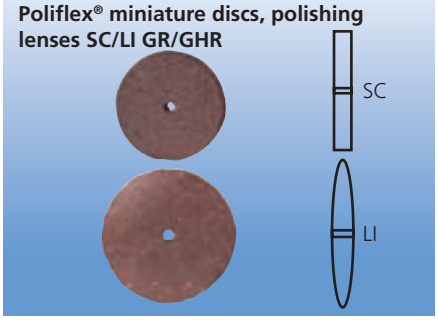
Ordering example:
EAN 4007220**146316**
PF KU 25/6 AR **120** GR

How to order:

PF	= Poliflex®
KU	= Shape ball
25	= Dia. D [mm]
6	= Shank dia. S_d [mm]
AR	= Aluminium oxide A, pink
120	= Grit size Please state required grit size.
GR	= Bond

Order No.	Grit size	EAN 4007220	Dia. D [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
Shank ø 3 mm								
PF KU 08/3 AR . . . GR	120	146217	8	3 x 30	24.000	35.800	10	28
PF KU 10/3 AR . . . GR	120	146231	10	3 x 30	19.000	28.600	10	38
Shank ø 6 mm								
PF KU 12/6 AR . . . GR	120	146255	12	6 x 40	16.000	23.800	10	120
PF KU 15/6 AR . . . GR	120	146279	15	6 x 40	12.500	19.000	10	150
PF KU 20/6 AR . . . GR	120	146293	20	6 x 40	9.500	14.300	10	230
PF KU 25/6 AR . . . GR	120	146316	25	6 x 40	7.500	11.400	10	340
PF KU 30/6 AR . . . GR	120	146323	30	6 x 40	6.500	9.500	5	230

Poliflex® miniature discs, polishing lenses SC/LI GR/GHR



Due to their miniature design, these tools are particularly suitable for use in confined and hard-to-reach areas.
Ideal for ultra-fine grinding on all metals, e.g., in tool and mould making, dental lab work and jewellery production.

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering note:
Please order matching arbors separately.

Ordering example:
EAN 4007220**146699**
PF SC 2503/2 AR **120** GR

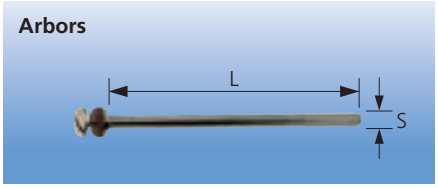
How to order:

PF	= Poliflex®
SC	= Shape wheel
2503	= Dia. D x width T mm
2	= Centre hole dia. H [mm]
AR	= Aluminium oxide A, pink
120	= Grit size Please state required grit size.
GR	= Bond

Order No.	Grit size		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable arbor		g
	120	220							
	EAN 4007220								
Disc shape									
PF SC 2503/2 AR . . . GR	146699	-	25 x 3	2	7.500	11.400	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100	450
PF SC 2503/2 CU . . . GHR	-	146705	25 x 3	2	7.500	11.400	BO 2,3/1,6 1-5, BO 3 /1,6 1-5	100	450
Lens shape									
PF LI 1604/2 CU . . . GHR	-	146675	16 x 4	2	12.000	17.900	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100	122
PF LI 2403/2 CU . . . GHR	-	146682	24 x 3	2	8.000	12.000	BO 2,3/1,6 1-5, BO 3/1,6 1,5	100	230

Arbors

Arbors



Re-usable arbor for Poliflex® fine grinding discs and lenses.

These arbors reduce set-up times significantly. Discs can be changed without removing the arbor from the machine spindle.

Order No.	EAN 4007220	Suitable for centre hole [mm]	S x L [mm]	Clamping width [mm]		g
BO 2,3/1,6 1-5	151570	1,6	2,34 x 43	1-5	10	20
BO 3/1,6 1-5	151587	1,6	3 x 43	1-5	10	34

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering note:
Please order arbors separately.

Ordering example:
EAN 4007220**144695**
PF SC 3006/6 AR **120** GR

How to order:

PF	= Poliflex®
SC	= Shape wheel
4010	= Dia. D x width T [mm]
6	= Centre hole dia. H [mm]
AR	= Aluminium oxide A, pink
120	= Grit size Please state required grit size.
GR	= Bond

Poliflex® fine grinding wheels GR

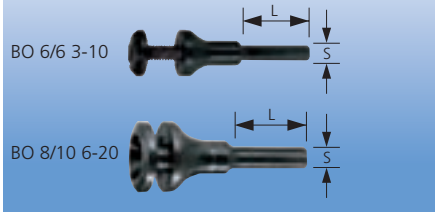
Order No.	Grit size	EAN 4007220	D x T [mm]	Cent. hole dia. H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable arbor		g
PF SC 3006/6 AR . . . GR	120	144695	30 x 6	6	6.300	9.500	BO 6/6 3-10	5	55
PF SC 5006/6 AR . . . GR	120	144718	50 x 6	6	3.800	5.700	BO 6/6 3-10	5	150
PF SC 8006/10 AR . . . GR	120	144756	80 x 6	10	2.400	3.500	BO 8/10 6-20	5	375
PF SC 100020/10 AR . . . GR	120	144787	100 x 20	10	1.900	2.800	BO 8/10 6-20	1	390

Arbors

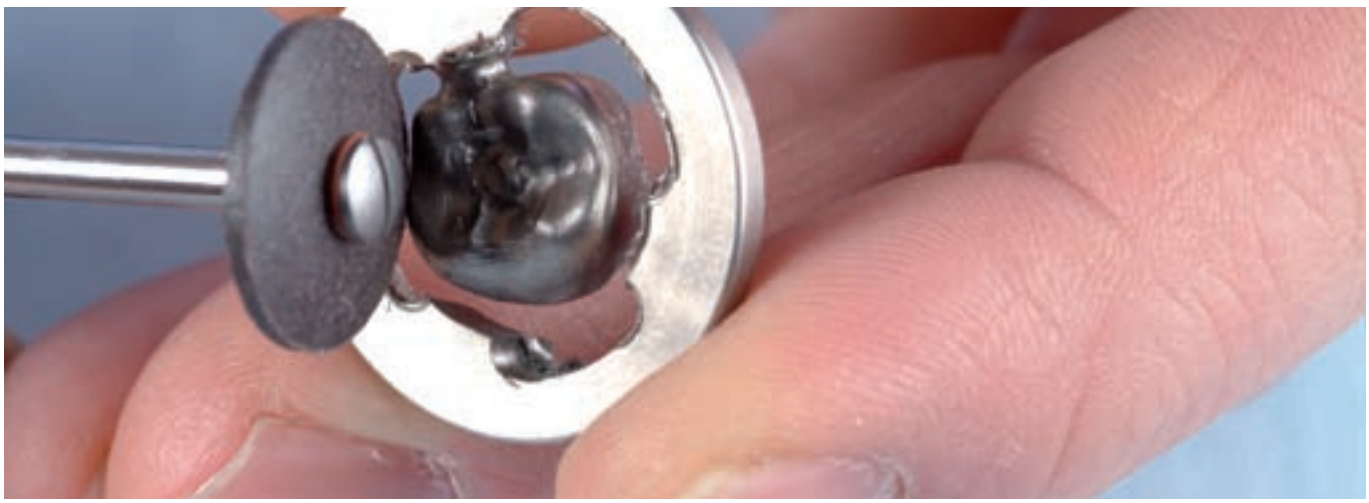
Re-usable arbor for Poliflex® fine grinding wheels.

These arbors reduce set-up times significantly. Discs can be changed without removing the arbor from the machine spindle.

Arbors



Order No.	EAN 4007220	Suitable for centre hole [mm]	S x L [mm]	Clamping width [mm]		g
BO 6/6 3-10	297650	6	6 x 25	3-10	1	38
BO 8/10 6-20	297667	10	8 x 30	6-20	1	88

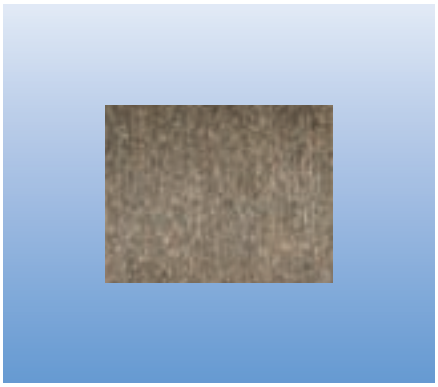


LR bond

Poliflex® fine grinding tools in LR bond are made from white aluminium oxide. The LR bond is a harder, durable bond.

Advantages of the LR bond

- LR bond is ideal for fine-grinding of **surfaces** on steel, stainless steels and titanium.
- Good stock removal with a long tool life and fine surface finish.

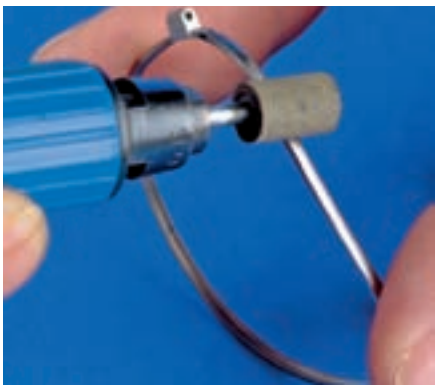


LHR bond

Poliflex® fine grinding tools in LHR bond are produced from a mix consisting of white aluminium oxide and green silicon carbide. The LHR bond is a hard, durable bond.

Advantages of LHR bond

- LHR is the perfect bond for **edge** grinding on steels and high-temperature alloys. These tools produce a fine, **shiny** finish.
- Long tool life, high edgeholding and stock removal capability.



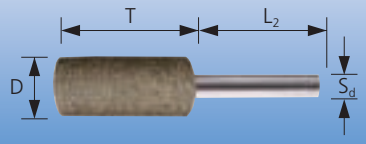
Application examples

- Fine-grinding on tools, dies and moulds.
- Grinding on nickel-based alloy components.
- Creation of a fine surface finish on parts made of high-temperature, heat-resistant alloys.

Recommendations for use

- Poliflex® fine mounted points in LR bond perform best on surfaces at a recommended cutting speed of 15-20 m/s.
- Poliflex® fine-grinding points in LHR bond perform best on edges at a recommended peripheral speed of 40-50 m/s.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.

Poliflex® fine grinding points ZY LR/LHR



Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering note:
Poliflex® fine grinding points LHR with grit size 60 are produced from an abrasive mix of AWCN = white aluminium oxide and green silicon carbide.

Ordering example:
EAN 4007220**145449**
PF ZY 1525/6 AW **120** LR
Please state required grit size.

Order No.	Grit size				D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		
	60	120	220	400						g
	EAN 4007220									
Shank ø 3 mm										
PF ZY 0408/3 AW . . . LR	-	144817	-	533697	4 x 8	3 x 30	95.000	143.200	10	22
PF ZY 0610/3 AW . . . LR	-	144831	-	-	6 x 10	3 x 30	64.000	95.400	10	29
PF ZY 0808/3 AW . . . LR	-	144862	-	-	8 x 8	3 x 30	47.500	71.600	10	33
PF ZY 0812/3 AW . . . LR	-	144909	144916	533758	8 x 12	3 x 30	47.500	71.600	10	37
PF ZY 1006/3 AW . . . LR	-	145852	-	-	10 x 6	3 x 30	38.000	57.200	10	37
PF ZY 1010/3 AW . . . LR	-	144961	144978	-	10 x 10	3 x 30	38.000	57.200	10	43
PF ZY 1015/3 AW . . . LR	-	145050	-	-	10 x 15	3 x 30	38.000	57.200	10	55
Shank ø 3 mm										
PF ZY 1208/3 AW . . . LR	-	145906	-	-	12 x 8	3 x 30	32.000	47.700	10	50
PF ZY 1212/3 AW . . . LR	-	145210	-	-	12 x 12	3 x 30	32.000	33.700	10	57

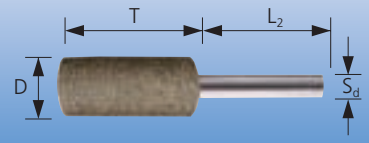
Continued on next page.

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering note:
Poliflex® fine grinding points LHR with grit size 60 are produced from an abrasive mix of AWCN = white aluminium oxide and green silicon carbide.

Ordering example:
EAN 4007220**145449**
PF ZY 1525/6 AW **120** LR
Please state required grit size.

Poliflex® fine grinding points ZY LR/LHR



Continued from last page.

Order No.	Grit size				D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		
	60	120	220	400						
	EAN 4007220									
PF ZY 1220/3 AW . . . LR	-	145272	-	-	12 x 20	3 x 30	32.000	33.700	10	79
Shank ø 6 mm										
PF ZY 1010/6 AW . . . LR	-	145012	-	-	10 x 10	6 x 40	38.000	57.200	10	120
PF ZY 1015/6 AW . . . LR	-	145104	-	-	10 x 15	6 x 40	38.000	57.200	10	130
PF ZY 1025/6 AW . . . LR	-	145142	145159	-	10 x 25	6 x 40	38.000	57.200	10	150
PF ZY 1212/6 AW . . . LR	-	145258	-	-	12 x 12	6 x 40	32.000	47.700	10	134
PF ZY 1220/6 AW . . . LR	-	145319	-	-	12 x 20	6 x 40	32.000	47.700	10	155
PF ZY 1515/6 AW . . . LR	-	145395	-	-	15 x 15	6 x 40	25.500	38.100	10	177
PF ZY 1525/6 AW . . . LR	-	145449	-	-	15 x 25	6 x 40	25.500	38.100	10	220
PF ZY 1530/6 AW . . . LR	-	145500	145517	-	15 x 30	6 x 40	25.500	38.100	10	240
PF ZY 2012/6 AW . . . LR	-	146002	-	-	20 x 12	6 x 40	19.000	28.600	10	200
PF ZY 2020/6 AW . . . LR	-	145593	-	-	20 x 20	6 x 40	19.000	28.600	10	265
PF ZY 2030/6 AW . . . LR	-	145661	145678	-	20 x 30	6 x 40	19.000	28.600	10	340
PF ZY 2525/6 AW . . . LR	-	145739	-	-	25 x 25	6 x 40	15.000	22.900	10	390
PF ZY 3030/6 AW . . . LR	-	145791	-	-	30 x 30	6 x 40	12.500	19.000	5	310
Shank ø 3 mm										
PF ZY 0812/3 AW . . . LHR	-	144923	-	-	8 x 12	3 x 30	95.000	76.700	10	37
Shank ø 6 mm										
PF ZY 1025/6 AWCN . . . LHR	145166	-	-	-	10 x 25	6 x 40	75.000	83.200	10	150
PF ZY 1025/6 AW . . . LHR	-	145173	-	-	10 x 25	6 x 40	75.000	83.200	10	150
PF ZY 1530/6 AWCN . . . LHR	145524	-	-	-	15 x 30	6 x 40	50.000	58.200	10	240
PF ZY 1530/6 AW . . . LHR	-	145531	-	-	15 x 30	6 x 40	50.000	58.200	10	240
PF ZY 2020/6 AW . . . LHR	-	145616	-	-	20 x 20	6 x 40	38.000	47.700	10	265

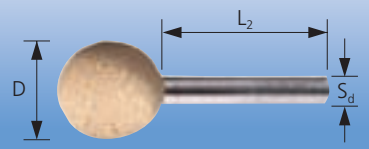
Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**146224**
PF KU 08/3 AW **120** LR

How to order:

PF	= Poliflex®
KU	= Shape ball
08	= Dia. D [mm]
3	= Shank dia. S_d [mm]
AW	= Aluminium oxide, white
120	= Grit size Please state required grit size.
LR	= Bond

Poliflex® fine grinding points KU LR



Order No.	Grit size	EAN 4007220	Dia. D [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		
Shank ø 3 mm								
PF KU 08/3 AW . . . LR	120	146224	8	3 x 30	47.000	71.600	10	28
PF KU 10/3 AW . . . LR	120	146248	10	3 x 30	38.000	57.200	10	38
Shank ø 6 mm								
PF KU 15/6 AW . . . LR	120	146286	15	6 x 40	29.500	38.100	10	150
PF KU 20/6 AW . . . LR	120	146309	20	6 x 40	19.000	28.600	10	230

Poliflex® fine grinding tools in TX bond are produced using regular aluminium oxide. The textile fabric inserts make the TX bond an extremely hard, durable bond.

Advantages

- TX-bonded tools are ideal for **edge grinding** on steels (including stainless grades), light alloys, non-ferrous metals and titanium. They produce a fine, **matt** surface finish.
- The very durable bond produces a highly aggressive abrasive action which nevertheless results in a fine surface finish.

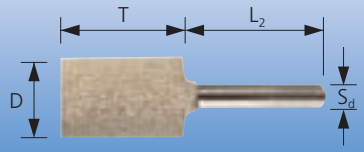
Application examples

- Fine grinding of hardened press and forging dies.
- Fine grinding of weld seams on stainless steel structures.
- Fine-grinding in preparation of polishing of jet engine or turbine parts.

Recommendations for use

- Poliflex® TX-bonded fine-grinding points perform best in edge-grinding applications at a recommended cutting speed of 20-30 m/s.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders. Please refer to catalogue 209 for detailed information and order data regarding power sources.

Poliflex® fine grinding points ZY TX



Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**297964**
PF ZY 2032/6 AN **120** TX

How to order:

PF	= Poliflex®
ZY	= Shape cylindrical
2032	= Dia. D x width T mm
6	= Shank dia. S_d [mm]
AN	= Aluminium oxide A, regular
120	= Grit size Please state required grit size.
TX	= Bond

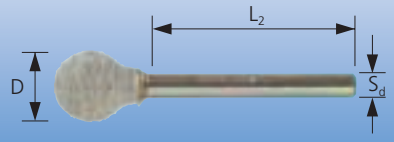
Order No.	Grit size		D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		
	80	120						
	EAN 4007220							
Shank ø 3 mm								
PF ZY 0610/3 AN . . . TX	298060	298077	6 x 10	3 x 30	63.000	95.400	10	30
PF ZY 0812/3 AN . . . TX	298084	298091	8 x 12	3 x 30	47.500	71.600	10	40
Shank ø 6 mm								
PF ZY 1025/6 AN . . . TX	297780	297889	10 x 25	6 x 40	38.000	57.200	10	172
PF ZY 1632/6 AN . . . TX	297919	297940	16 x 32	6 x 40	24.000	35.800	10	248
PF ZY 2032/6 AN . . . TX	297957	297964	20 x 32	6 x 40	19.000	28.600	10	310
PF ZY 2532/6 AN . . . TX	297988	297995	25 x 32	6 x 40	15.000	22.900	10	408

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**298190**
PF KU 10/3 AN **120** TX

How to order:
PF = Poliflex®
KU = Shape ball
10 = Dia. D [mm]
3 = Shank dia. S_d [mm]
AN = Aluminium oxide A, regular
120 = Grit size
Please state required grit size.
TX = Bond

Poliflex® fine grinding points KU TX



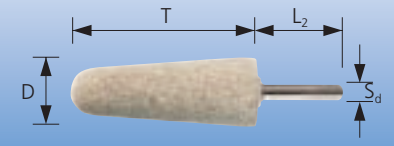
Order No.	Grit size		Dia. D [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		
	80	120						g
	EAN 4007220							
PF KU 06/3 AN . . . TX	298145	298152	6	3 x 30	63.000	95.400	10	23
PF KU 08/3 AN . . . TX	-	298176	8	3 x 30	47.500	71.600	10	59
PF KU 10/3 AN . . . TX	-	298190	10	3 x 30	38.000	57.200	10	60

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**298098**
PF KE 2570/6 AN **80** TX

How to order:
PF = Poliflex®
KE = Shape tapered
2570 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]
AN = Aluminium oxide A, regular
80 = Grit size
Please state required grit size.
TX = bond

Poliflex® fine grinding points KE TX



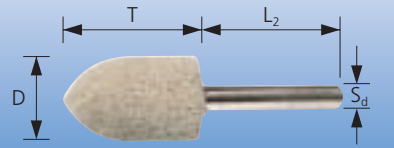
Order No.	Grit size		D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		
	80	120						g
	EAN 4007220							
PF KE 1025/6 AN . . . TX	298121	298138	10 x 25	6 x 40	38.000	57.200	10	172
PF KE 1645/6 AN . . . TX	298015	-	16 x 45	6 x 40	24.000	38.800	10	200
PF KE 2570/6 AN . . . TX	298008	-	25 x 70	6 x 40	15.000	22.900	10	335

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**298046**
PF SP 2032/6 AN **120** TX

How to order:
PF = Poliflex®
SP = Shape tree
2032 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]
AN = Aluminium oxide A, regular
120 = Grit size
Please state required grit size.
TX = Bond

Poliflex® fine grinding points SP TX



Order No.	Grit size		D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		
	80	120						g
	EAN 4007220							
Shank ø 3 mm								
PF SP 1020/3 AN . . . TX	298107	298114	10 x 20	3 x 30	38.000	57.200	10	40
Shank ø 6 mm								
PF SP 2032/6 AN . . . TX	298039	298046	20 x 32	6 x 40	19.000	28.600	10	213

Poliflex® fine grinding wheels SC TX

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering note:
Please order arbors separately.

Ordering example:
EAN 4007220**505502**
PF SC 2503/3 A **80** TX

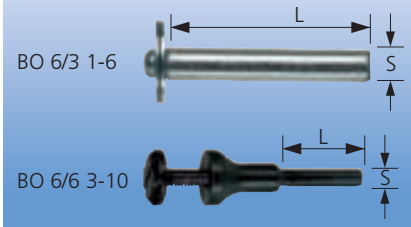
How to order:

PF	= Poliflex®
SC	= Wheel
2503	= Dia. D x width T [mm]
3	= Centre hole dia. H [mm]
A	= Aluminium oxide A
80	= Grit size Please state required grit size.
TX	= Bond

Order No.	Grit size		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable arbor		
	80	120							g
	EAN 4007220								
PF SC 2503/3 A . . . TX	505502	505519	25 x 3	3	15.000	22.900	BO 6/3 1-6	20	100
PF SC 2506/3 A . . . TX	-	505540	25 x 6	3	15.000	22.900	BO 6/3 1-6	20	180
PF SC 4003/3 A . . . TX	505564	505571	40 x 3	3	9.500	14.300	BO 6/3 1-6	10	180
PF SC 4006/6 A . . . TX	-	505618	40 x 6	6	9.500	14.300	BO 6/6 3-10	10	140

Arbors

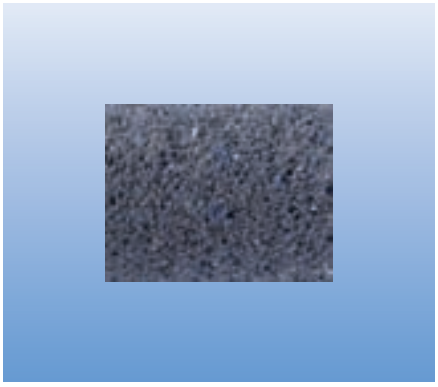
Arbors

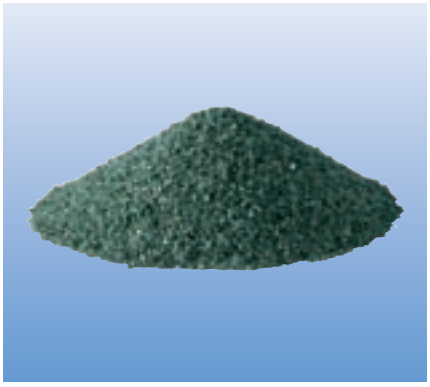


Re-usable arbors for Poliflex® fine grinding wheels.

These arbors reduce set-up times significantly. Discs can be changed without removing the arbor from the machine spindle.

Order No.	EAN 4007220	Suitable for centre hole [mm]	S x L [mm]	Clamping width [mm]		g
BO 6/3 1-6	505694	3	6 x 40	1-6	1	38
BO 6/6 3-10	297650	6	6 x 25	3-10	1	38





Poliflex® mounted texturing tools are excellent for work on components made of stainless steel (INOX). The high concentration of abrasive grit is spread homogenously within the PUR bond.

Advantages

- The open structure and flexible bond ensure good adaptation to contours and soft, cool grinding.
- Faults and transitions to dressed grinding patterns can be refined using Poliflex® structuring tools in a quick and effective manner.

Recommendations for use

- Poliflex® structuring grinding tools perform best at the recommended cutting speed of 5-10 m/s.
- Suitable drive systems include flexible shafts and electric or air-powered straight grinders.

Application examples
- Weld finishing on stainless steel sheets (INOX).
- Grinding out of surface defects in eg sink production.
- Achieving desired visual finish on food processing equipment.
- Blending grinding patterns on handrail fabrication.

Abrasive: Silicon carbide (SiC)

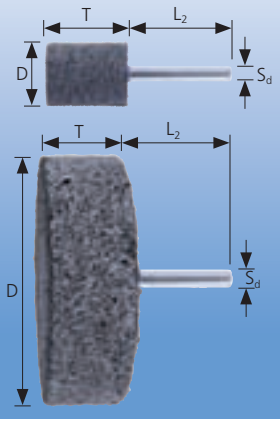
Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**752029**
PF ZY 2030/6 CU 16 PU-STRUC

How to order:

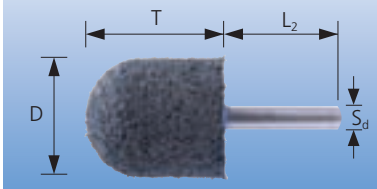
PF	= Poliflex®
ZY	= Shape cylindrical
2030	= Dia. D x width T [mm]
6	= Shank dia. S_d [mm]
CU	= Silicon carbide SiC
16	= Grit size
PU-STRUC	= Bond

Poliflex® mounted texturing points ZY



Order No.	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
Shank ø 6 mm							
PF ZY 2030/6 CU 16 PU-STRUC	752029	20 x 30	6 x 40	4.750 - 9.550	14.000	10	310
PF ZY 2530/6 CU 16 PU-STRUC	752036	25 x 30	6 x 40	3.800 - 7.600	11.500	10	365
PF ZY 3232/6 CU 16 PU-STRUC	752043	32 x 32	6 x 40	3.000 - 6.000	9.000	5	295
PF ZY 7510/6 CU 16 PU-STRUC	752050	75 x 10	6 x 40	1.250 - 2.500	4.000	1	90
PF ZY 7530/6 CU 16 PU-STRUC	752067	75 x 30	6 x 40	1.250 - 2.500	4.000	1	240
Shank ø 8 mm							
PF ZY 10030/8 CU 16 PU-STRUC	752074	100 x 30	8 x 40	1.000 - 1.900	2.800	1	430

Poliflex® mounted texturing points WR



Application examples
- Weld dressing in radiused areas of stainless steel components.
- Grinding out surface defects in the manufacture of kitchen sinks and counters (radiused bottom areas).
- Creating desired finishes on items of food processing equipment
- Blending of stroke patterns in handrail fabrication.

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

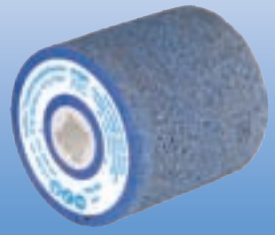
Ordering example:
EAN 4007220**752081**
PF WR 3045/8 CU 16 PU-STRUC

How to order:

PF	= Poliflex®
WRC	= Shape cylindrical with radius end
3045	= Dia. D x width T [mm]
8	= Shank dia. S_d [mm]
CU	= Silicon carbide SiC
16	= Grit size
PU-STRUC	= Bond

Order No.	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
PF WR 3045/8 CU 16 PU-STRUC	752081	30 x 45	8 x 40	3.150 - 6.350	9.500	5	420
PF WR 4045/8 CU 16 PU-STRUC	752104	40 x 45	8 x 40	2.350 - 4.750	7.000	5	595
PF WR 5045/8 CU 16 PU-STRUC	752111	50 x 45	8 x 40	1.900 - 3.800	5.700	5	760

Poliflex® texturing rollers



Application examples
- Weld dressing on stainless steel components.
- Blending of stroke patterns on large surfaces.

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering note:
For further roll tools, please refer to pages 65 and 78 in this catalogue and catalogue 208.

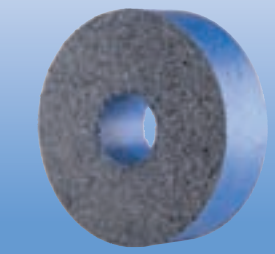
Ordering example:
EAN 4007220**752159**
PF W 100100 CU 16 PU-STRUC

How to order:

PF	= Poliflex®
W	= Shape roller
100100	= Dia. D x width T [mm]
CU	= Silicon carbide SiC
16	= Grit size
PU-STRUC	= Bond

Order No.	EAN 4007220	D x T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
PF W 100100/19 CU 16 PU-STRUC	752159	100 x 100	19	1.000 - 1.900	2.800	1	1.300

Poliflex® texturing wheels



Application examples
- Weld dressing on stainless steel components.
- Grinding out surface defects in the manufacture of kitchen sinks and counters.
- Creating desired finishes on items of food processing equipment.
- Blending of stroke patterns in handrail fabrication.
- Suitable for use on large-to-medium surfaces.

Safety note:
For safety reasons, the stated max. RPM level must not be exceeded.

Ordering example:
EAN 4007220**752135**
PF SC 10010/20 CU 16 PU-STRUC

How to order:

PF	= Poliflex®
SC	= Shape Wheel
100100	= Dia. D x T width [mm]
20	= Centre hole dia. [mm]
CU	= Silicon carbide SiC
16	= Grit size
PU-STRUC	= Bond

Order No.	EAN 4007220	D x T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable arbor		g
PF SC 10010/20 CU 16 PU-STRUC	752135	100 x 10	20	1.000 - 1.900	2.800	BO 12/20 10-50	1	140
PF SC 10030/20 CU 16 PU-STRUC	752142	100 x 30	20	1.000 - 1.900	2.800	BO 12/20 10-50	1	395

Made of oriented high-grade ceramic fibres embedded in a special resinoid bond. Suitable for use on surfaces and in hard-to-reach areas in tool and mould making.

A PFERD product providing high stock removal and a high-quality surface finish.

Suitable for use on manual or air-powered and electric-powered filing devices (e.g. air-power filing device PFG 07/220). Please refer to catalogue 209 for detailed information and order data.

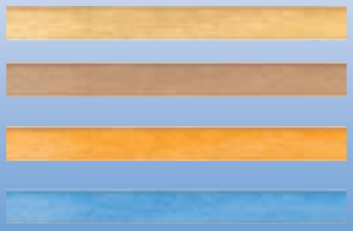
Abrasive: Ceramic fibres

Workpiece materials:
- Tool steel (quenched and tempered)
- Steel castings, high-grade steels
- Aluminium, copper

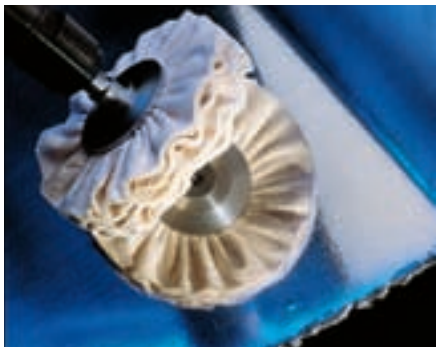
Recommendation for use:
The highest stock removal is achieved by applying the file at 45° angle.

Ordering example:
EAN 4007220**668887**
KFF 0,5 x 4 x 150 A 180 (gold)
Please state the required grit size.

Ceramic fibre files KFF



Order No.	Grit size				Height [mm]	Width [mm]	Length [mm]		
	180 (golden)	280 (light-brown)	400 (orange)	700 (blue)					
	EAN 4007220								
KFF 0,5 x 4 x 150 A	668887	668894	668900	668917	0,5	4	150	1	8
KFF 1,0 x 4 x 150 A	668924	668931	668948	668955	1,0	4	150	1	8
KFF 2,0 x 4 x 150 A	668962	668979	668986	668993	2,0	4	150	1	8
KFF 0,5 x 6 x 150 A	669006	669013	669020	669037	0,5	6	150	1	8
KFF 1,0 x 6 x 150 A	669044	669051	669068	669075	1,0	6	150	1	8
KFF 2,0 x 6 x 150 A	669082	669099	669105	669112	2,0	6	150	1	8
KFF 1,0 x 10 x 150 A	669129	669136	669143	669150	1,0	10	150	1	8



PFERD offers an extensive range of polishing tools in diverse shapes and diameters.

Our range consists essentially of two types:
- Felt tools, used mainly for high-gloss polishing work.
- Felt tools with metal inserts, provide higher stock removal rates and designed mainly for pre-polishing with diamond grinding pastes.

The programme contains four different types of cloth ring:
- Sisal cloth (ST)
- Hard cloth (TH)
- Soft cloth (TW)
- Flannel (FL)

Advantages

- The broad diversity of shapes and diameters permits polishing of complex workpiece geometries.
- PFERD felt tools can be profiled as required.

Application examples

- Preliminary and high-gloss polishing of injection moulding tools for plastic parts.
- High-gloss polishing of stainless steel components (INOX).
- Preliminary polishing of fittings.
- Polishing of tungsten carbide cutting blades.

Recommendations for use

- Felt tools perform best at the recommended cutting speed of 5-10 m/s, where the optimum balance between stock removal, surface finishing quality, workpiece temperature loads and tool wear is achieved.
- Felt tools are used in combination with diamond polishing pastes and polishing paste bars. If the polishing paste is changed, the polishing tool must also be changed.
- Cloth rings are used with polishing pastes for preliminary and high-gloss polishing.

Safety note

For safety reasons, it is imperative to remain within the stated RPM limit at all times.

Safety recommendations

 = Wear eye protection!

 = Wear hearing protection!

 = Wear a respirator!

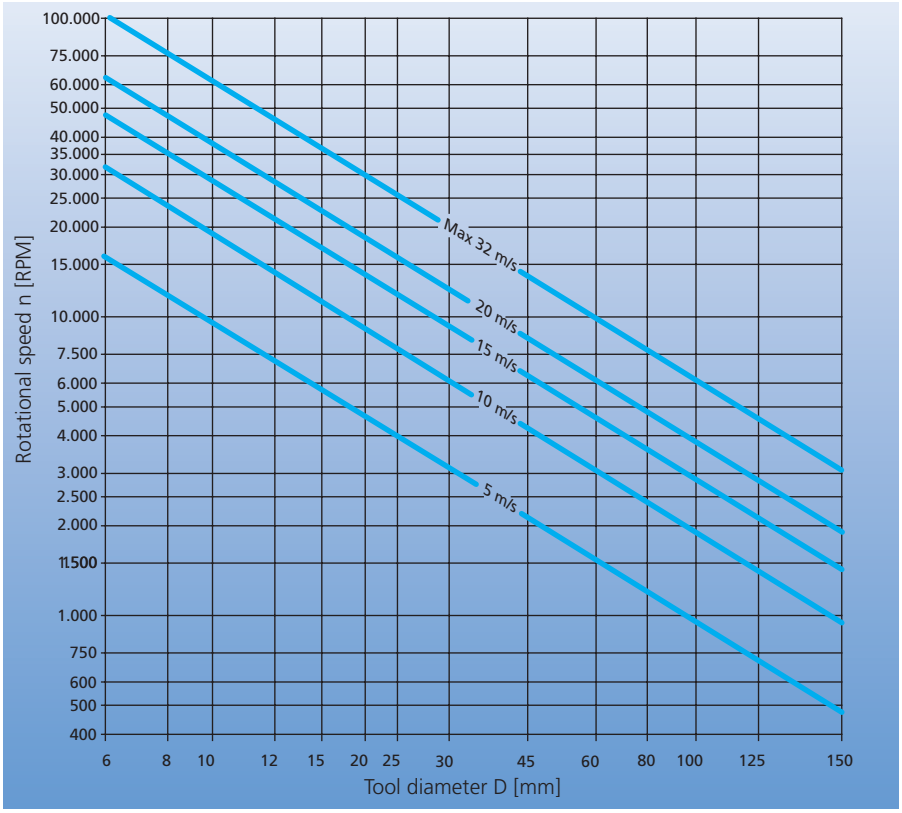
 = Read the instructions!

Cutting speed for felt tools and cloth rings

In this diagram, the cutting speeds are represented using blue diagonal lines. The vertical line representing the tool dia. meets the given cutting speed (diagonals). From its point of intersection proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] of the felt tools, cloth rings and machine.

Example
FK ZYA 2530/6 ST-BO
Cutting speed: 5-10 m/s
Speed range: 3.800-7.600 RPM

Example
TR 10010 ST/10
Cutting speed: 10-15 m/s
Speed range: 1.900-2.850 RPM



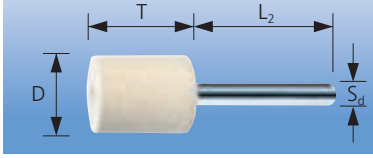
The ZYA style (cylindrical) mounted felt points are mainly used peripherally. The ST-BO type with centre hole is suitable particularly for face-down polishing.

Felt points with metal inserts provide increased stock removal in pre-polishing with diamond polishing pastes.

Ordering example:
EAN 4007220**295243**
FK ZYA 0610/3

How to order:
FK = Felt point
ZYA = Shape cylindrical
1520 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]

Shape ZYA



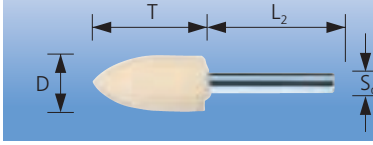
Order No.	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
Shank ø 3 mm							
FK ZYA 0610/3	295243	6 x 10	3 x 40	16.000 - 32.000	100.000	10	35
FK ZYA 0810/3	295250	8 x 10	3 x 40	12.000 - 24.000	75.000	10	36
FK ZYA 1014/3	153871	10 x 14	3 x 40	10.000 - 20.000	61.000	10	39
FK ZYA 1014/3 MS	295304	10 x 14	3 x 40	10.000 - 20.000	61.000	10	39
Shank ø 6 mm							
FK ZYA 1014/6	153772	10 x 14	6 x 40	10.000 - 20.000	61.000	10	134
FK ZYA 1520/6 ST-BO	294727	15 x 20	6 x 40	6.000 - 12.000	41.000	10	155
FK ZYA 2025/6 ST-BO	153802	20 x 25	6 x 40	5.000 - 10.000	30.500	10	215
FK ZYA 2530/6 ST-BO	153888	25 x 30	6 x 40	4.000 - 8.000	24.400	10	245
FK ZYA 1520/6 MS ST-BO	295311	15 x 20	6 x 40	6.000 - 12.000	41.000	10	155
FK ZYA 2025/6 MS ST-BO	295328	20 x 25	6 x 40	5.000 - 10.000	30.500	10	215
FK ZYA 2530/6 MS ST-BO	295335	25 x 30	6 x 40	4.000 - 8.000	24.400	10	245

The SPK (conical pointed) style is preferred for work on radii and contours.

Ordering example:
EAN 4007220**294734**
FK SPK 2025/6

How to order:
FK = Felt point
SPK = Shape conical pointed
2025 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]

Shape SPK



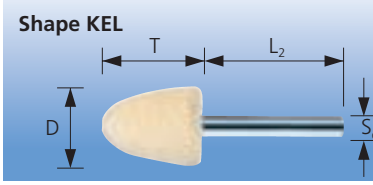
Order No.	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
Shank ø 3 mm							
FK SPK 0812/3	295267	8 x 12	3 x 40	12.000 - 24.000	75.000	10	36
FK SPK 1018/3	153925	10 x 18	3 x 40	10.000 - 20.000	61.000	10	39
FK SPK 1218/3	295274	12 x 18	3 x 40	8.000 - 16.000	51.000	10	40
Shank ø 6 mm							
FK SPK 1018/6	153796	10 x 18	6 x 40	10.000 - 20.000	61.000	10	135
FK SPK 1520/6	153932	15 x 20	6 x 40	6.000 - 12.000	41.000	10	155
FK SPK 1530/6	153949	15 x 30	6 x 40	6.000 - 12.000	41.000	10	185
FK SPK 2025/6	294734	20 x 25	6 x 40	5.000 - 10.000	30.500	10	215

KEL type (conical with radius end) felt points are employed chiefly for work in radius areas.

Ordering example:
EAN 4007220**153956**
FK KEL 2025/6

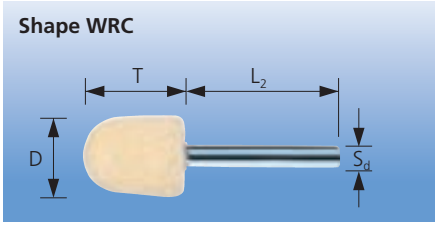
How to order:
FK = Felt point
KEL = Shape conical with radius end
2025 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]

Shape KEL



Order No.	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
FK KEL 1520/6	294741	15 x 20	6 x 40	6.000 - 12.000	41.000	10	155
FK KEL 2025/6	153956	20 x 25	6 x 40	5.000 - 10.000	30.500	10	215
FK KEL 2530/6	153819	25 x 30	6 x 40	4.000 - 8.000	24.400	10	245
FK KEL 3035/6	153826	30 x 35	6 x 40	3.000 - 6.000	20.000	10	305

Shape WRC



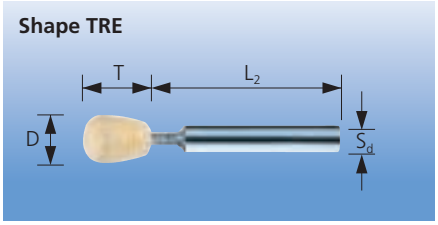
WRC style felt points (cylindrical with radius end) are the tool of choice for minor concave and convex contours.

Ordering example:
EAN 4007220**153901**
FK WRC 2025/6

How to order:
FK = Felt point
WRC = Shape cylindrical with radius end
2025 = Dia. D x T width [mm]
6 = Shank dia. S_d [mm]

Order No.	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
Shank ø 3 mm							
FK WRC 0812/3	295281	8 x 12	3 x 40	12.000 - 24.000	75.000	10	36
FK WRC 1014/3	295298	10 x 14	3 x 40	10.000 - 20.000	61.000	10	39
Shank ø 6 mm							
FK WRC 1520/6	153895	15 x 20	6 x 40	6.000 - 12.000	41.000	10	155
FK WRC 2025/6	153901	20 x 25	6 x 40	5.000 - 10.000	30.500	10	215
FK WRC 2530/6	153918	25 x 30	6 x 40	4.000 - 8.000	24.400	10	245

Shape TRE



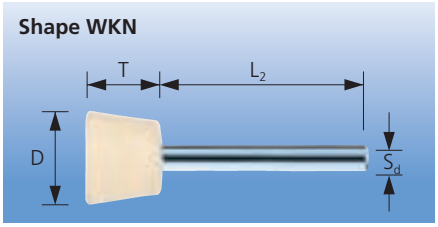
The TRE (oval) shape is mainly used for work on small radii.

Ordering example:
EAN 4007220**153789**
FK TRE 1014/6

How to order:
FK = Felt point
TRE = Shape oval
1014 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]

Order No.	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
FK TRE 1014/6	153789	10 x 14	6 x 40	10.000 - 20.000	61.000	10	134

Shape WKN



WKN (inverted cone) shaped points are used chiefly for work on interior angles.

Ordering example:
EAN 4007220**294758**
FK WKN 2016/6

How to order:
FK = Felt point
WKN = Shape inverted cone
2016 = Dia. D x width T [mm]
6 = Shank dia. S_d [mm]

Order No.	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. speed [RPM]		g
FK WKN 2016/6	294758	20 x 16	6 x 40	5.000 - 10.000	30.500	10	185

Felt wheels are normally used for polishing with the peripheral surface.

Felt wheels with metal inserts provide increased stock removal in pre-polishing with diamond abrasive pastes.

Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**295359**
FK SC 10020/10 MS

How to order:

FK SC	= Felt
SC	= Wheel
10020	= Dia. x width [mm]
10	= Centre hole dia. H [mm]
MS	= Metall insert (brass)

Felt wheels

Order No.	EAN 4007220	Dia. D [mm]	Width T [mm]	H [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable matching arbors		g
FK SC 3007/6	153864	30	7	6	3.000 - 6.000	20.000	BO 6/6 3-10	5	20
FK SC 4509/6	153840	45	9	6	2.000 - 4.000	13.500	BO 6/6 3-10	5	57
FK SC 6010/6	297605	60	10	6	1.500 - 3.000	10.000	BO 6/6 3-10	5	133
FK SC 8010/10	154069	80	10	10	1.000 - 2.000	7.500	BO 8/10 6-20	5	185
FK SC 10020/10	297612	100	20	10	900 - 1.800	6.100	BO 8/10 6-20	1	142
FK SC 12520/20	297629	125	20	20	750 - 1.500	4.900	BO 12/20 10-50, BO MK 1/20 10-50	1	196
FK SC 15025/20	297636	150	25	20	600 - 1.200	4.000	BO 12/20 10-50, BO MK 1/20 10-50	1	360
FK SC 20030/20	297643	200	30	20	500 - 1.000	3.000	BO 12/20 10-50, BO MK 1/20 10-50	1	615
FK SC 8010/10 MS	295342	80	10	10	1.000 - 2.000	7.500	BO 8/10 6-20	5	185
FK SC 10020/10 MS	295359	100	20	10	900 - 1.800	6.100	BO 8/10 6-20	1	142
FK SC 12520/20 MS	295366	125	20	20	750 - 1.500	4.900	BO 12/20 10-50, MK 1/20 10-50	1	196

Arbors

Re-usable arbor for felt wheels.

These arbors reduce set-up times significantly. Tools can be changed without removing the arbor from the machine spindle.

Explanation of the code system:
S = Shank diameter [mm]
L = Shank length [mm]

Arbors

Order No.	EAN 4007220	Suitable for centre hole [mm]	S x L [mm]	Clamping width [mm]		g
BO 6/6 3-10	297650	6	6 x 25	3-10	1	38
BO 8/10 6-20	297667	10	8 x 30	6-20	1	88
BO 12/20 10-50	297674	20	12 x 35	10-50	1	360
BO MK 1/20 10-50	297681	20	-	10-50	1	370

Polishing Tools

Cloth Rings

Cloth rings

Cloth rings are used with polishing pastes for preliminary and high-gloss polishing.

For very smooth finishes it may be recommended to use several, or even all, types in succession.

These tools are available in four types:

ST sisal fabric	= pre-polishing
TH hard cloth	= pre-polishing
TW soft cloth	= high-gloss polishing
FL flannel	= high-gloss polishing

Recommendation for use:

- Pre-polishing of steel or stainless steel, cloth ring ST or TH with polishing paste PP 1 VP Fe
- Pre-polishing of aluminium or brass, cloth ring ST or TH with polishing paste PP 2 VP MS
- Pre-polishing of non-ferrous metals, cloth ring ST or TH with polishing paste PP 3 VP NE
- High-gloss polishing of all metals, cloth rings TW or FL with polishing paste PP 4 HGP
- High-gloss polishing of plastics, cloth rings TW or FL with polishing paste PP 5 HGP K

Recommended cutting speed:
TW and FL 5 - 15 m/s
ST and TH 10-15 m/s

Ordering note:
Please order arbors separately.
TR 12510, version ST (sisal cloth): 10 mm centre hole dia. (25,4/hexagonal, arbor FR/VR 12/25,4)

Ordering example:
EAN 4007220**294185**
TR 12510-20 TW

How to order:

TR	= Cloth ring
12510	= Dia. x in use width [mm]
20	= Centre hole dia. H [mm]
TW	= Soft cloth
	Please state required design.

Order No.	Type				Dia. D [mm]	H [mm]	Useful width [mm]	Recom. speed [RPM]	Max. speed [RPM]	Suitable matching arbors		
	FL Flannel	ST Sisal fabric	TH Hard cloth	TW Soft cloth								
	EAN 4007220											
TR 5010-6	804339	-	804315	804322	50	6	10	3.800	12.000	BO 6/6 3-10	5	230
TR 8010-10	294116	294086	294093	294109	80	10	10	2.500	7.500	BO 8/10 6-20	5	285
TR 10010-10	294154	294123	294130	294147	100	10	10	1.900	6.100	BO 8/10 6-20	5	485
TR 12510-20	294192	294161	294178	294185	125	20	10	1.300	4.900	BO 12/20 10-50, BO MK 1/20 10-50	5	694
TR 15010-20	294239	294208	294215	294222	150	20	10	1.250	4.000	BO 12/20 10-50, BO MK 1/20 10-50	5	1.070
TR 20010-20	294277	294246	294253	294260	200	20	10	950	3.000	BO 12/20 10-50, BO MK 1/20 10-50	5	1.810

Arbors

Arbors

BO 6/6 3-10
BO 8/10 6-20
BO 12/20 10-50
BO MK 1/20 10-50

Re-usable arbor for cloth rings.

These arbors reduce set-up times significantly. Tools can be changed without removing the arbor from the machine spindle.

Explanation of the code system:
S = Shank diameter [mm]
L = Shank length [mm]

Order No.	EAN 4007220	Suitable for centre hole [mm]	S x L [mm]	Clamping width [mm]		
BO 6/6 3-10	297650	6	6 x 25	3-10	1	38
BO 8/10 6-20	297667	10	8 x 30	6-20	1	88
BO 12/20 10-50	297674	20	12 x 35	10-50	1	360
BO MK 1/20 10-50	297681	20	-	10-50	1	370

Oil-soluble grinding compounds with sharp-edged SiC grain are ideal for fine-polishing operations, e.g. regrinding of valves or shaft bearings, and in preparation of polishing steps with felt tools and cloth rings.

Ordering example:
EAN 4007220**298664**
SFP 600

How to order:
SFP = Grinding compound
600 = Grit size

Grinding compounds

Order No.	Grit size	EAN 4007220	Content [g]		g
SFP 90	90	153963	250	1	310
SFP 150	150	153970	250	1	310
SFP 280	280	153987	250	1	310
SFP 360	360	153994	250	1	310
SFP 600	600	298664	250	1	310
SFP 800	800	154007	250	1	310

Diamond polishing pastes are used for work on very hard materials e.g. tungsten carbide and and heat-treated steels. They are used with felt points or felt wheels.
The diamond polishing pastes can be diluted or dissolved in water or alcohol.
The extremely high concentration ensures quick and effective work.

Available grit sizes:
30 = coarse (P 500)
15 = medium (P 1200)
7 = fine (P 2500)
3 = very fine
P = Grit size according to ISO 6344.

Recommendation for use:
- When using diamond polishing pastes, use the coarse paste first.
- If extensive surface improvements are required, use several grit sizes, after another, each finer than the previous. Wash well before using a finer grade of paste.
- Please make sure when changing grit size that a new, clean abrasive support (e.g. felt point or felt disc) is used.

Ordering note:
Grit sizes are indicated in µm.

Diamond polishing pastes

Order No.	Grit size [µm]	EAN 4007220	Cap colour	Content [g]		g
DPP 30-5	30	294543	brown	5	1	45
DPP 30-20	30	535981	brown	20	1	85
DPP 15-5	15	294536	blue	5	1	45
DPP 15-20	15	535998	blue	20	1	85
DPP 7-5	7	294505	red	5	1	45
DPP 7-20	7	536001	red	20	1	85
DPP 3-5	3	294499	green	5	1	45
DPP 3-20	3	536018	green	20	1	85

This dilution is used to maintain a consistent lubricant layer between the abrasive support and the workpiece in polishing applications.

Recommendation for use:
The diluting preparation should be used extremely sparingly. Excessive use will wash out diamond grain from the paste, thus diminishing polishing performance.

Special diluent for diamond polishing pastes

Order No.	EAN 4007220	Content [ml]		g
PSP 125	294550	125	1	145

Polishing paste bars

PFERD offers five different pastes. They are colour coded according to application purpose.

Ordering example:
EAN 4007220**294574**
PP 2 VP MS

How to order:

PP	= Polishing paste bar
2	= Number
VP	= Pre-polishing
MS	= Aluminium + brass

Order No.	Type	EAN 4007220	Colour	Use for	Width x Height x Length [mm]		g
PP 1 VP Fe	pre-polishing	294567	green	Steel + stainless steel (INOX)	70 x 50 x 140	1	1.000
PP 2 VP MS	pre-polishing	294574	grey	Aluminium + brass	70 x 50 x 140	1	1.000
PP 3 VP NE	pre-polishing	294581	brown	Non-ferrous metals	70 x 50 x 140	1	1.000
PP 4 HGP	high-gloss polishing	294598	pink	all metals	70 x 50 x 140	1	1.000
PP 5 HGP K	high-gloss polishing	294604	beige	Plastics	70 x 50 x 140	1	1.000

Grinding Oils

Grinding oils

Grinding oils are used in combination with abrasive-coated cloth tools.

PFERD provides three types:
- FE for steel
- NE for non-ferrous metals and stainless steel (INOX)
- ALU for aluminium

Active cutting additives in the oil are formulated to prevent discolouration of non-ferrous (NE) and in particular stainless steel surfaces (INOX). The FE type additive protects steel from corrosion, the ALU type additive prevents grinding tools from clogging.

Advantages:
- Grinding oils lengthen tool life.
- The lubrication and cooling effect prevent excess temperature developing.
- Chip loading to the abrasive coating is reduced.
- The surface finish is improved.

Ordering example:
EAN 4007220**294451**
411/1 NE

How to order:

411	= Grinding oil
/1	= Size
NE	= Suitable for non-ferrous metals

Order No.	EAN 4007220	Use for	Content		g
Spray can					
410 Fe	147597	Steel	Spray can 470 ml	1	475
411 NE	147603	Non-ferrous metals, stainless steel (INOX)	Spray can 470 ml	1	475
412 ALU	791332	Aluminium	Spray can 470 ml	1	475
Canister 1 l					
410/1 Fe	294444	Steel	Canister 1 l	1	1.145
411/1 NE	294451	Non-ferrous metals, stainless steel (INOX)	Canister 1 l	1	1.145
412/1 ALU	791349	Aluminium	Canister 1 l	1	1.145
Canister 5 l					
410/5 Fe	294468	Steel	Canister 5 l	1	5.455
411/5 NE	294475	Non-ferrous metals, stainless steel (INOX)	Canister 5 l	1	5.455
412/5 ALU	791356	Aluminium	Canister 5 l	1	5.455

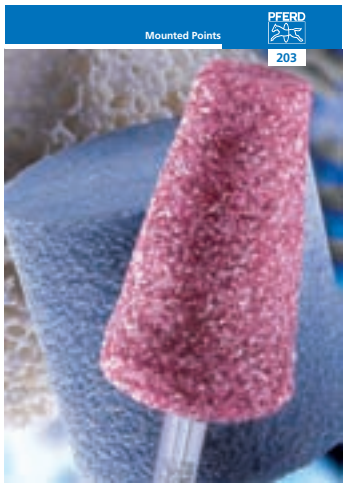
Quality Tools from One Source

Catalogue 201

Files

Catalogue 202

Burrs

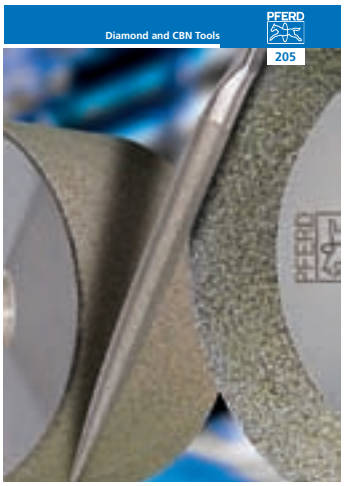


Catalogue 203

Mounted Points

Catalogue 204

Fine Grinding and Polishing Tools

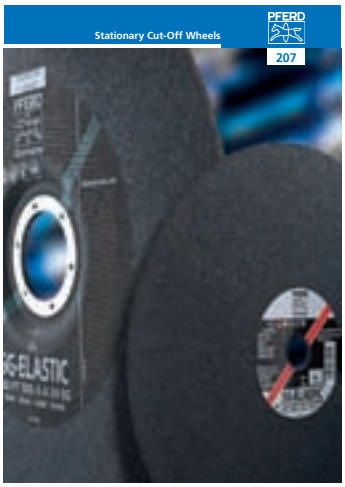


Catalogue 205

Diamond and CBN tools

Catalogue 206

Grinding and Cut-Off Wheels



Catalogue 207

Stationary Cut-Off Wheels

Catalogue 208

Industrial Power Brushes

Catalogue 209

Tool Drives